

CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE LOWER HATCHIE RIVER WATERSHED

4.1 Background.

4.2. Characterization of HUC-10 Subwatersheds

4.2.A. 0801020801 (Hatchie River)

4.2.B. 0801020802 (Spring Creek)

4.2.C. 0801020803 (Clover Creek)

4.2.D. 0801020804 (Hatchie River)

4.2.E. 0801020805 (Big Muddy Creek)

4.2.F. 0801020806 (Hatchie River)

4.2.G. 0801020807 (Cane Creek)

4.2.H. 0801020808 (Indian Creek)

4.1. BACKGROUND. This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Description of point source contributions
 - ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
- iii. Description of nonpoint source contributions

The Tennessee portion of the Lower Hatchie River Watershed (HUC 08010208) has been delineated into eight HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

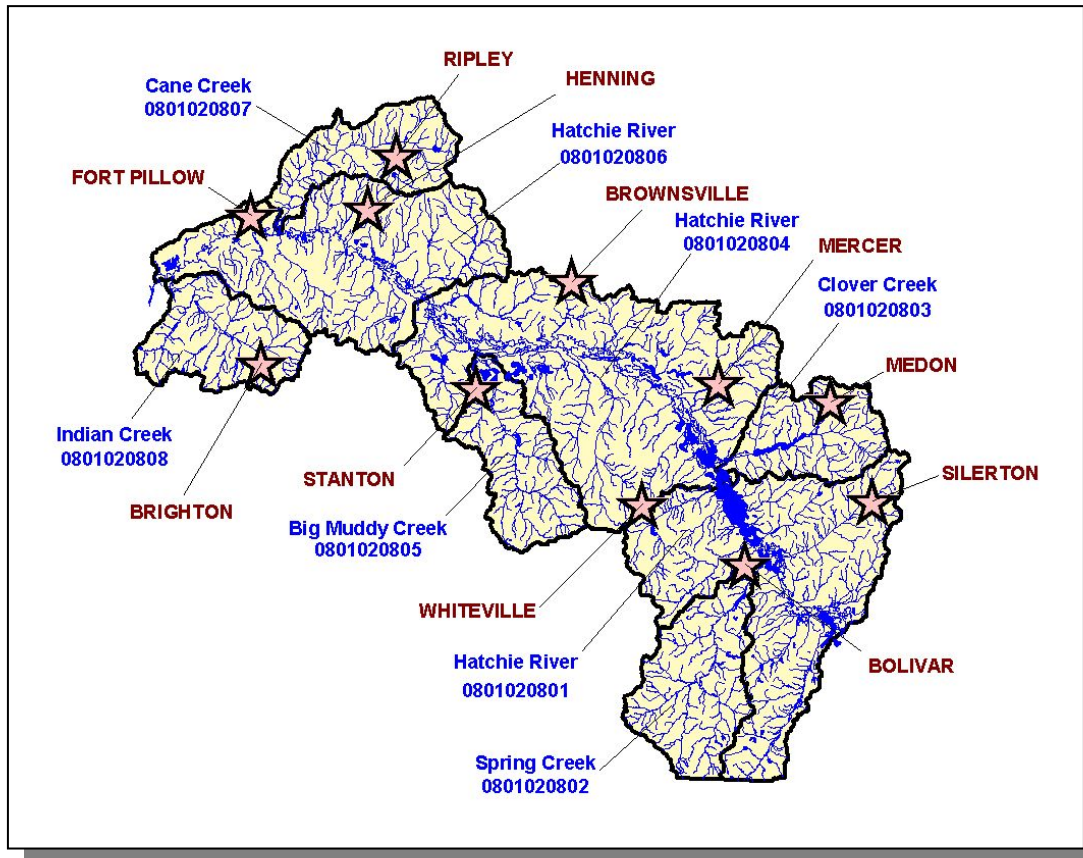


Figure 4-1. The Tennessee Portion of the Lower Hatchie River Watershed is Composed of Eight USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Bolivar, Brighton, Brownsville, Fort Pillow, Henning, Medon, Mercer, Ripley, Silerton, Stanton, and Whiteville are shown for reference.

4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Tennessee portion of the Lower Hatchie River Watershed.

HUC-10	HUC-12	
0801020801	080102080101 (Hatchie River)	080102080107 (Grays Creek)
	080102080102 (Porters Creek)	080102080108 (Pleasant Run Creek)
	080102080103 (Wade Creek)	080102080109 (Mill Creek)
	080102080104 (Cub Creek)	080102080110 (Short Creek)
	080102080105 (Hatchie River)	080102080111 (Clear Creek)
	080102080106 (Piney Creek)	
0801020802	080102080201 (Upper Spring Creek)	080102080202 (Lower Spring Creek)
0801020803	080102080301 (Lacy Creek)	080102080302 (Clover Creek)
0801020804	080102080401 (Hatchie River)	080102080407 (Poplar Creek)
	080102080402 (Muddy Creek)	080102080408 (Carter Creek)
	080102080403 (Big Black Creek)	080102080409 (Sugar Creek)
	080102080404 (Hatchie River)	080102080410 (Hatchie River)
	080102080405 (Jeffers Creek)	080102080411 (Little Muddy Creek)
	080102080406 (Bear Creek)	080102080412 (Cypress Creek)
0801020805	080102080501 (Upper Big Muddy Creek)	080102080502 (Lower Big Muddy Creek)
0801020806	080102080601 (Hatchie River)	080102080604 (Town Creek)
	080102080602 (Lagoon Creek)	080102080605 (Hatchie River)
	080102080603 (Hatchie River)	080102080606 (Mathis Creek)
0801020807	080102080701 (Upper Cane Creek)	080102080702 (Lower Cane Creek)
0801020808	080102080801 (Upper Indian Creek)	080102080802 (Lower Indian Creek)

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.

4.2.A. 0801020801.

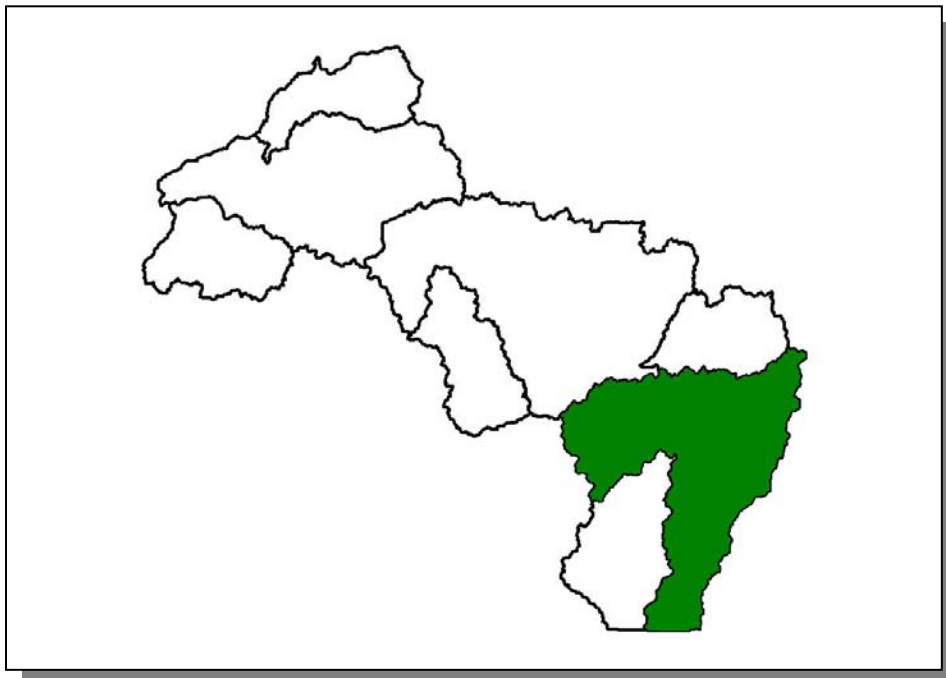


Figure 4-2. Location of Subwatershed 0801020801. HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.A.i. 080102080101 (Hatchie River).

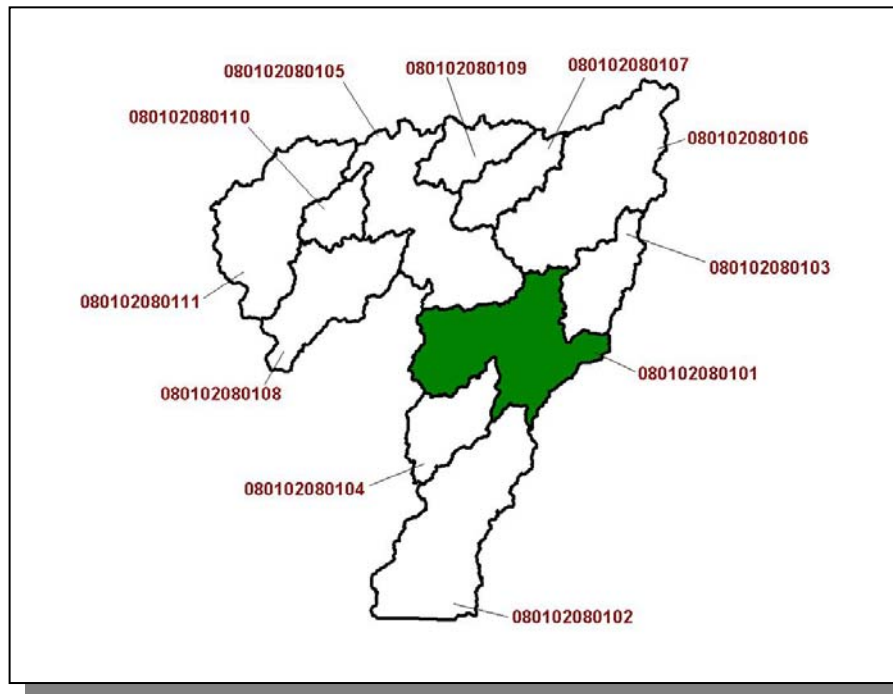


Figure 4-3. Location of Subwatershed 080102080101. All HUC-12 subwatershed boundaries are shown for reference.

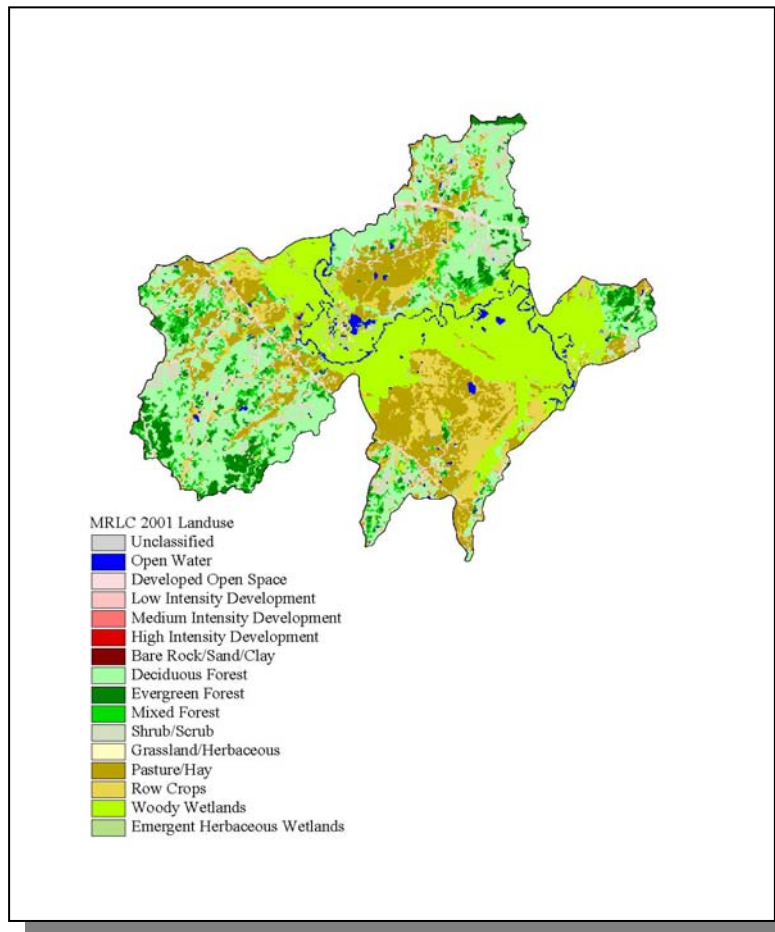


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 080102080101.

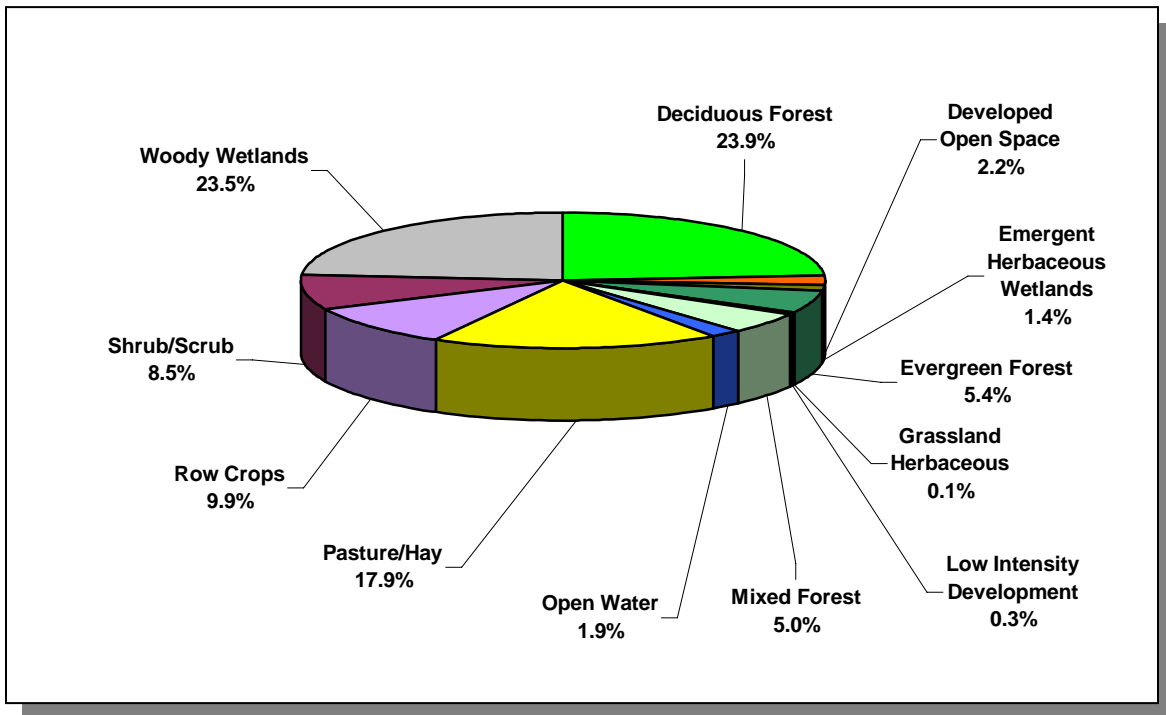


Figure 4-5. Illustration of Land Use Distribution in Subwatershed 080102080101.

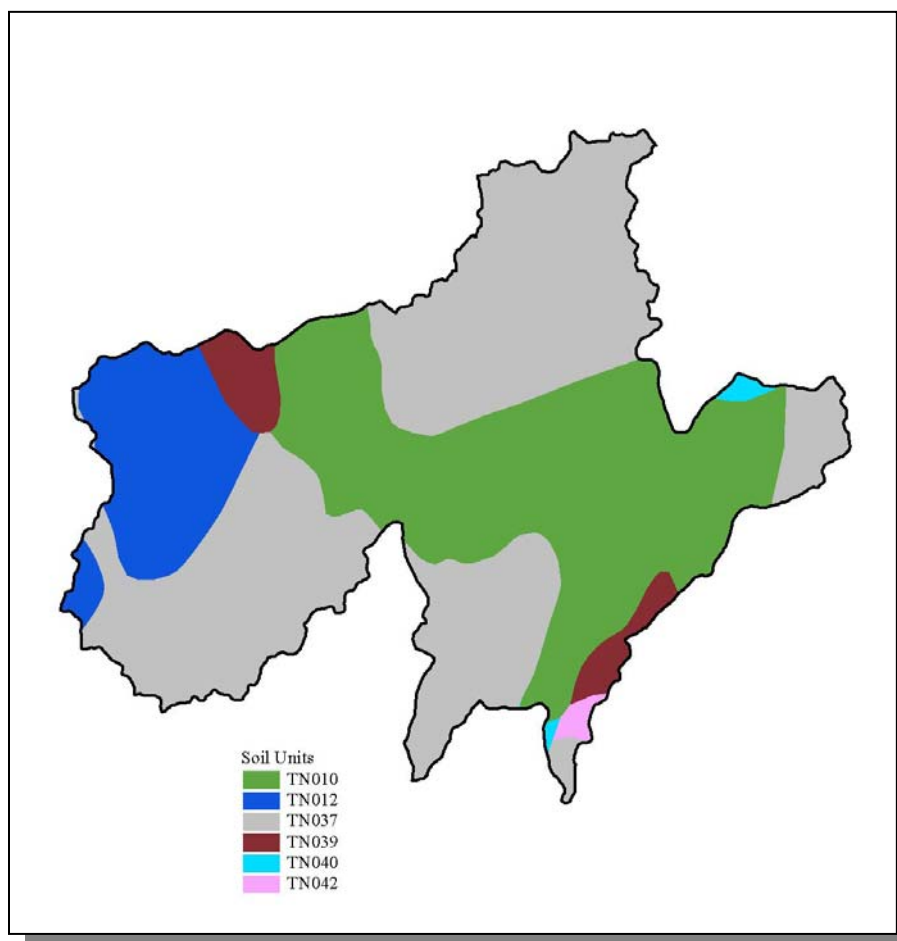


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080101.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	SiltyLoam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN039	24.00	C	1.35	5.20	SiltyLoam	0.47
TN040	40.00	C	1.35	5.18	SiltyLoam	0.38
TN042	0.00	C	2.53	5.11	SiltyLoam	0.34

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080101. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Hardeman	23,377	24,702	28,105	1.35	316	334	380	20.3

Table 4-3. Population Estimates in Subwatershed 080102080101.

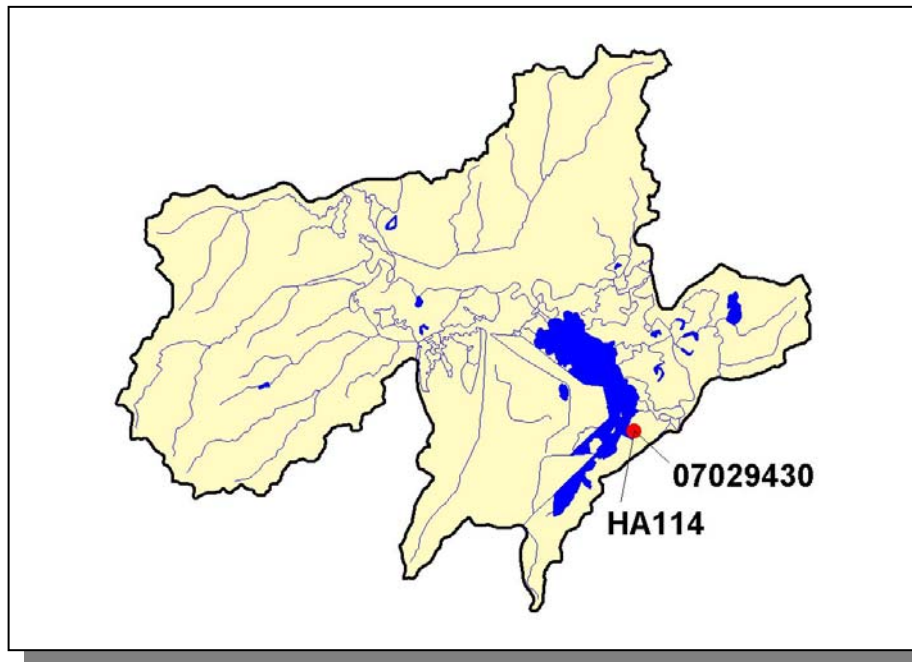


Figure 4-7. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080101. More information is provided in Appendix IV.

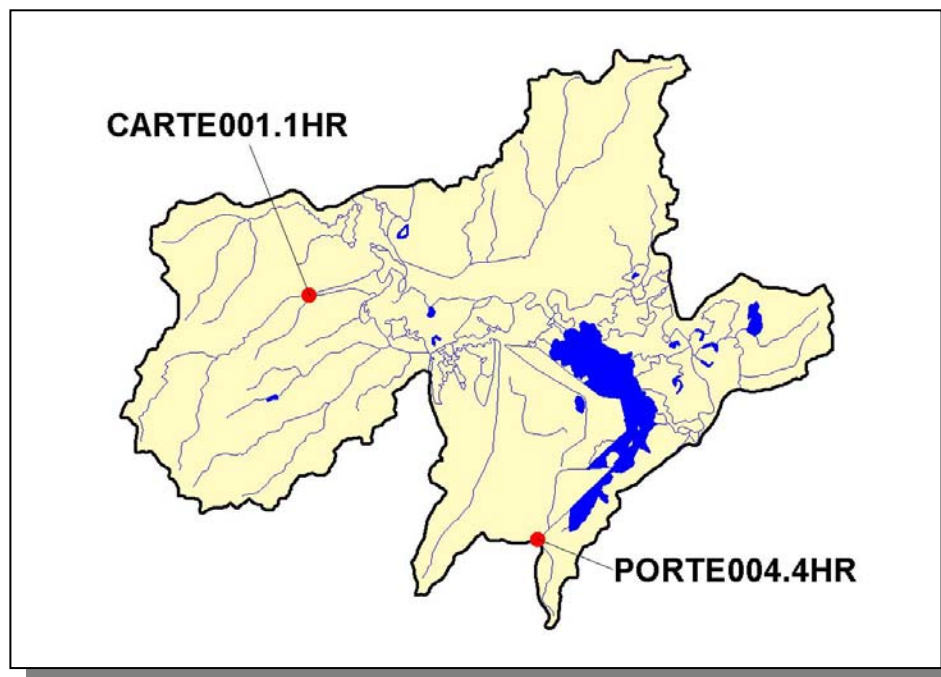


Figure 4-8. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080101. More information, including site names and locations, is provided in Appendix IV.

4.2.A.i.a. Point Source Contributions.

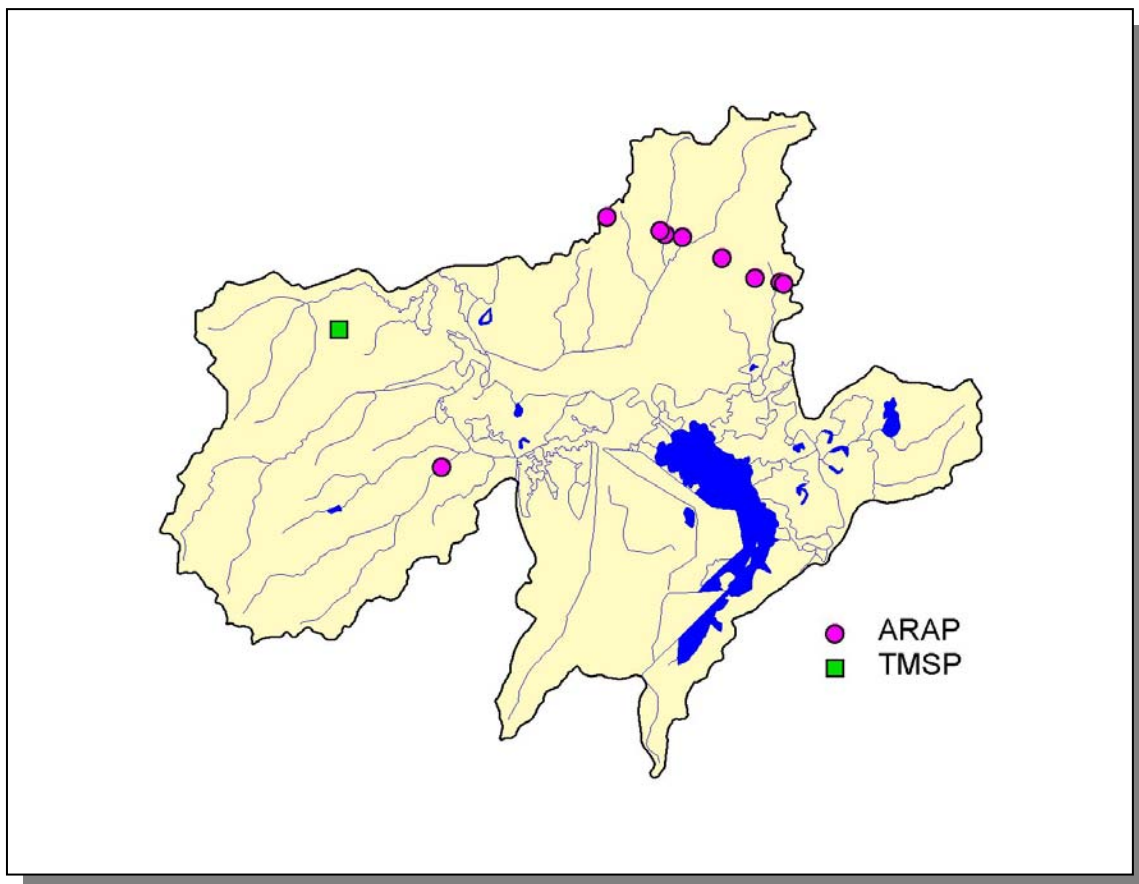


Figure 4-9. Location of Permits Issued in Subwatershed 080102080101. More information, including the names of facilities, is provided in Appendix IV.

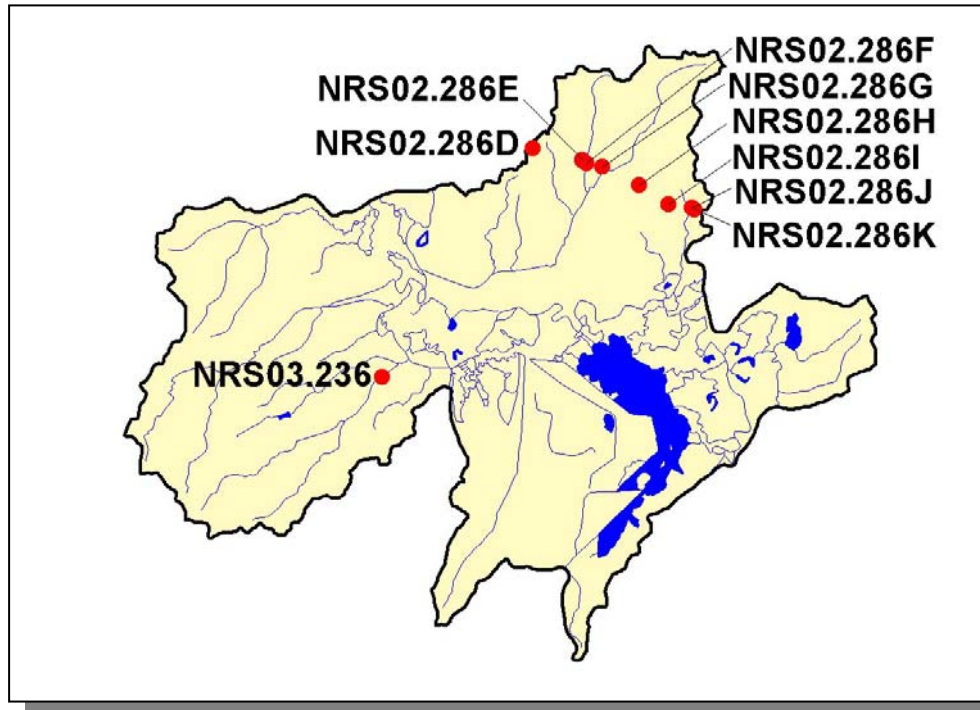


Figure 4-10. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080101. More information is provided in Appendix IV.

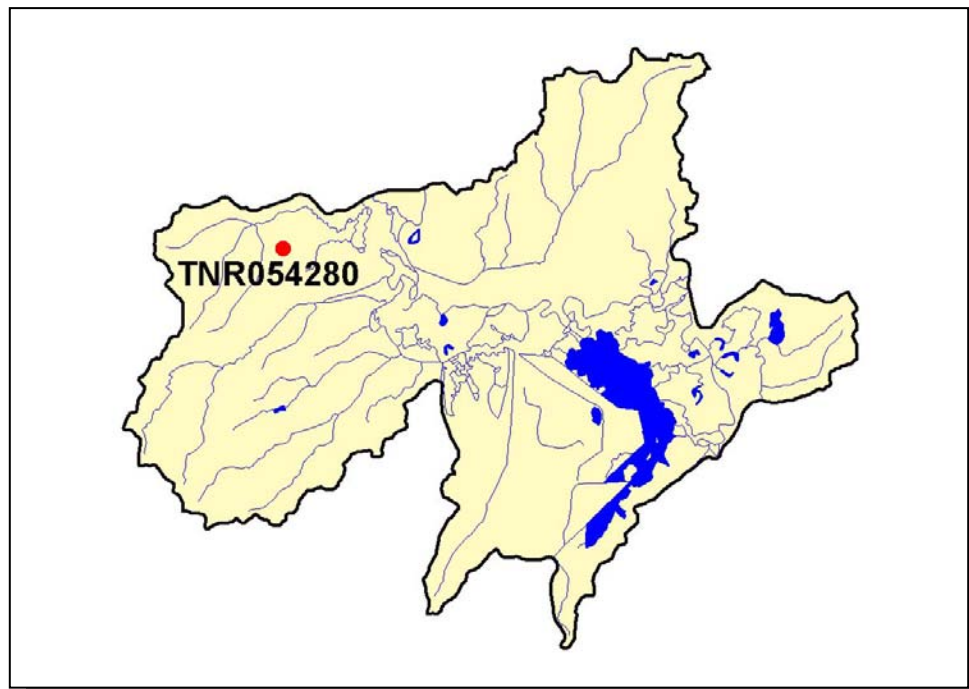


Figure 4-11. Location of TMSP Sites in Subwatershed 080102080101. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
174	301	<5	<5	99	<5

Table 4-4. Summary of Livestock Count Estimates in Subwatershed 080102080101. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-5. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	16.6

Table 4-6. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-7. Annual Estimated Total Soil Loss in Subwatershed 080102080101.

4.2.A.ii. 080102080102 (Porters Creek).

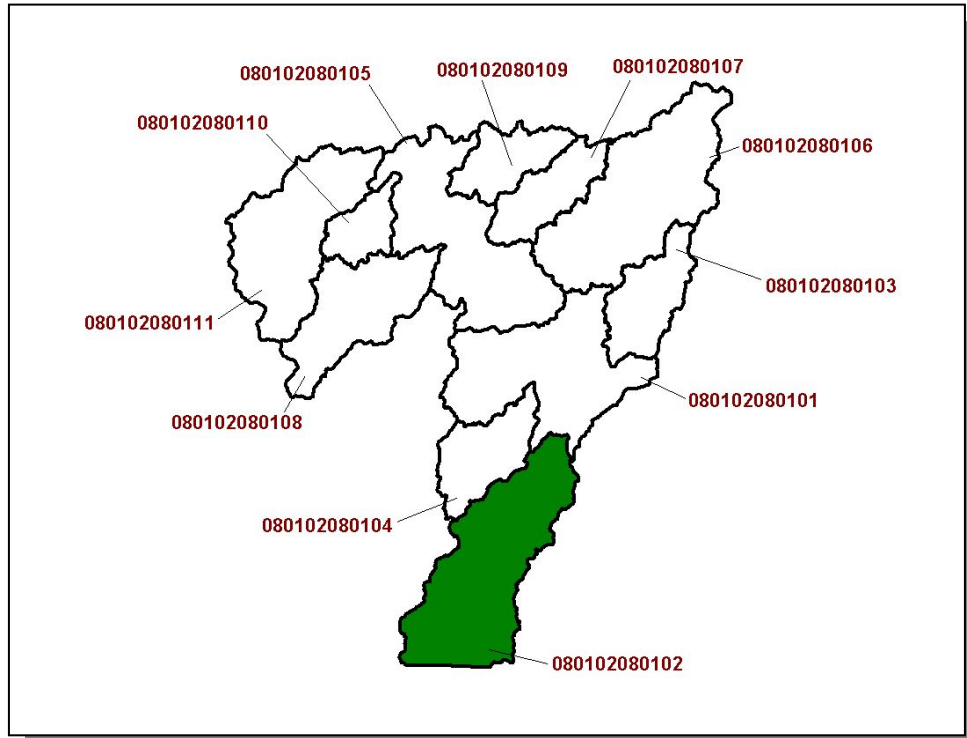


Figure 4-12. Location of Subwatershed 080102080102. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

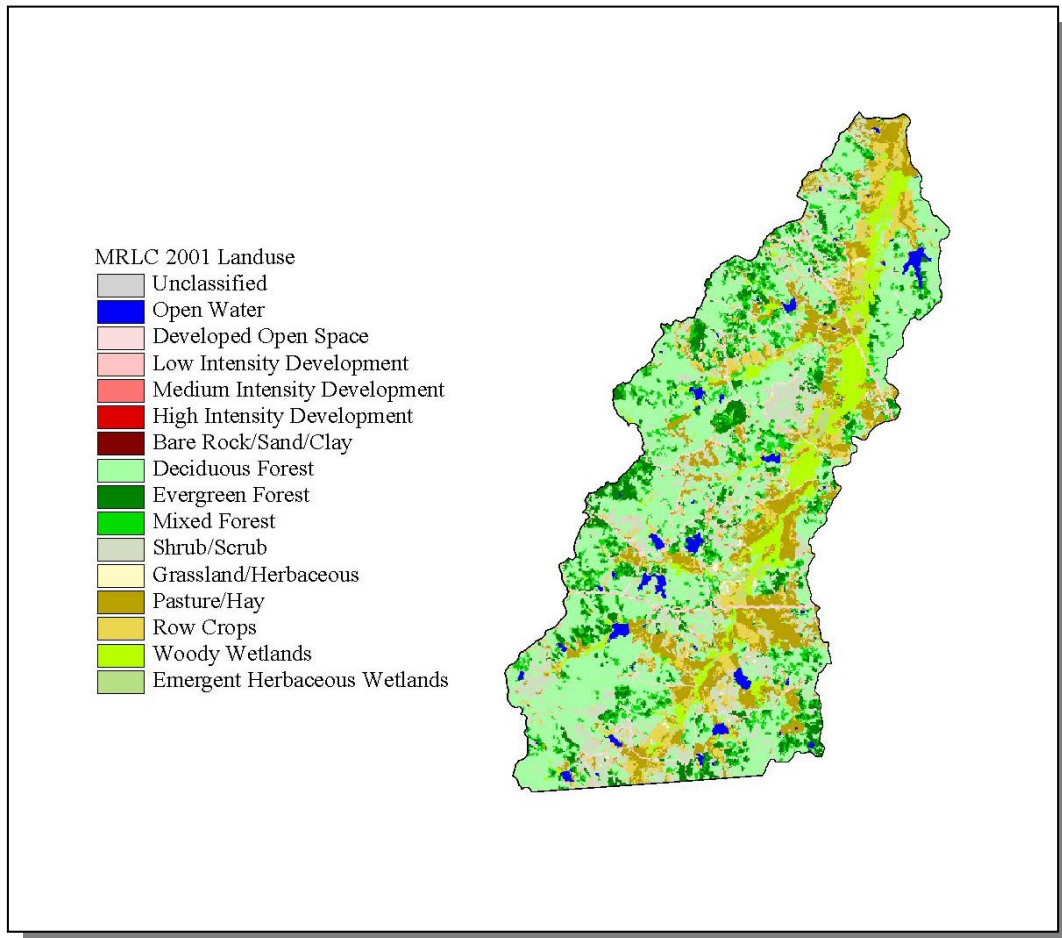


Figure 4-13. Illustration of Land Use Distribution in Subwatershed 080102080102.

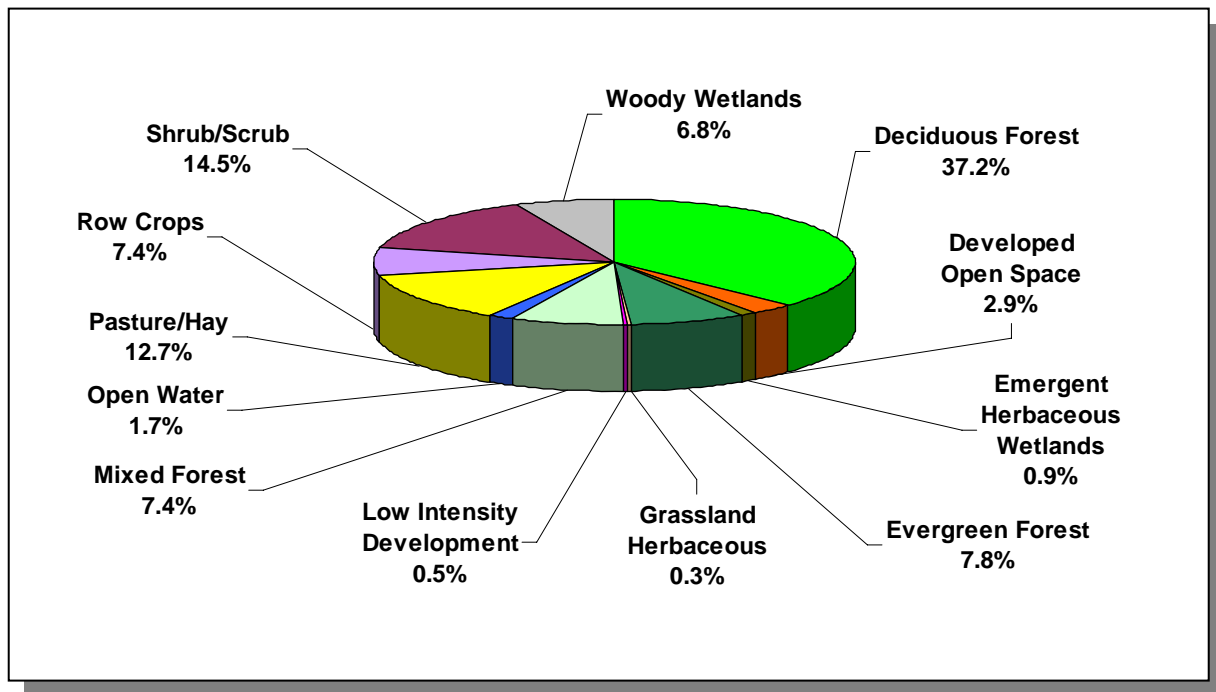


Figure 4-14. Land Use Distribution in Subwatershed 080102080102. More information is provided in Appendix IV.

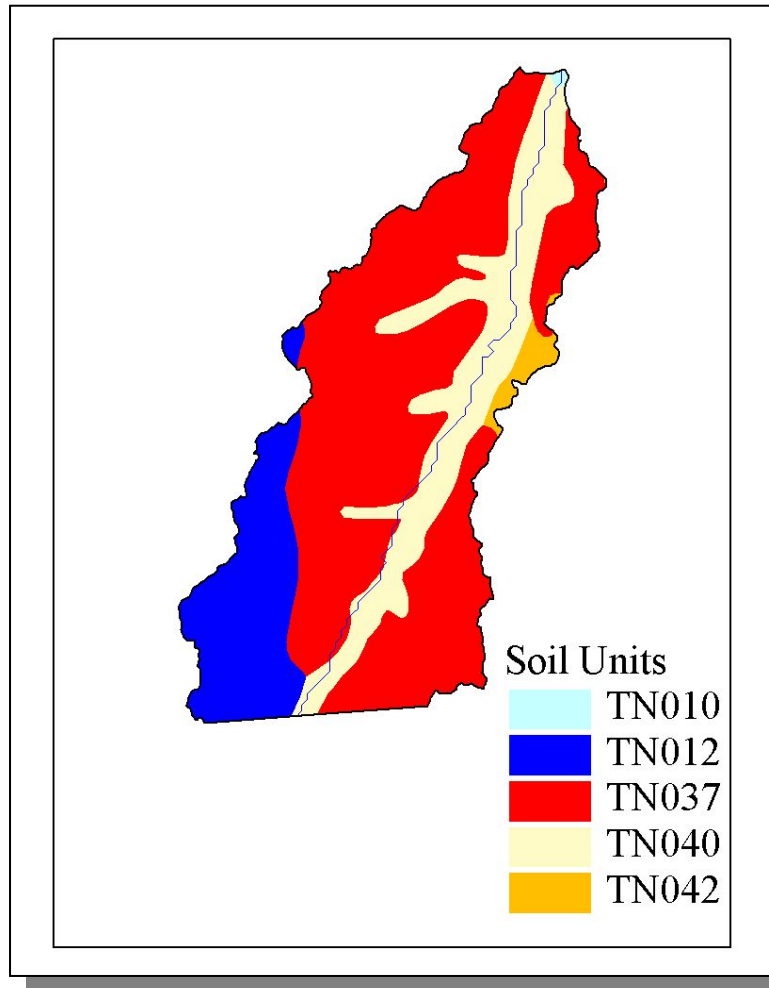


Figure 4-15. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080102.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN040	40.00	C	1.33	5.18	Silty Loam	0.38
TN042	0.00	C	2.53	5.11	Silty Loam	0.34

Table 4-8. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080102. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	6.61	1,545	1,632	1,857	20.2

Table 4-9. Population Estimates in Subwatershed 080102080102.

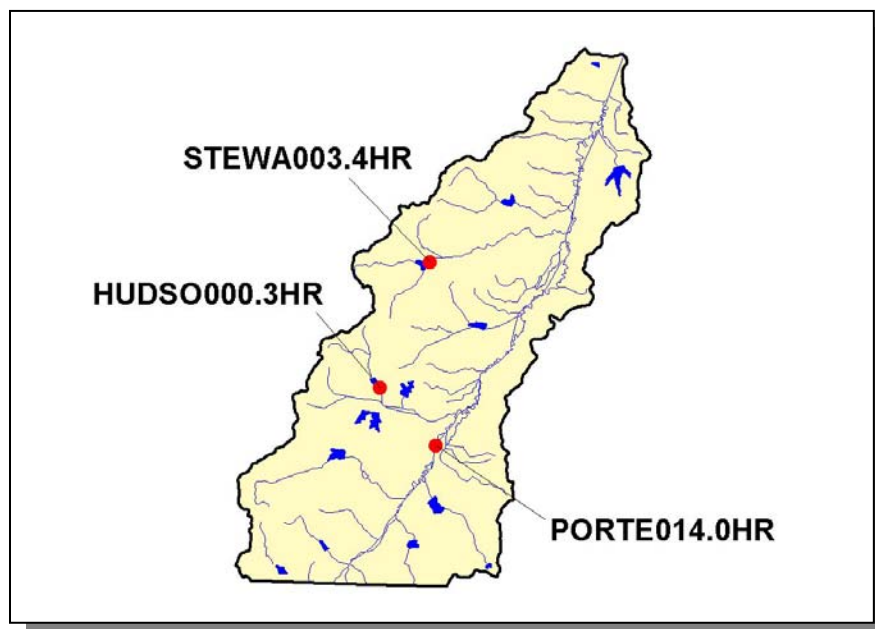


Figure 4-16. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080102. More information, including site names and locations, is provided in Appendix IV.

4.2.A.ii.a. Point Source Contributions.

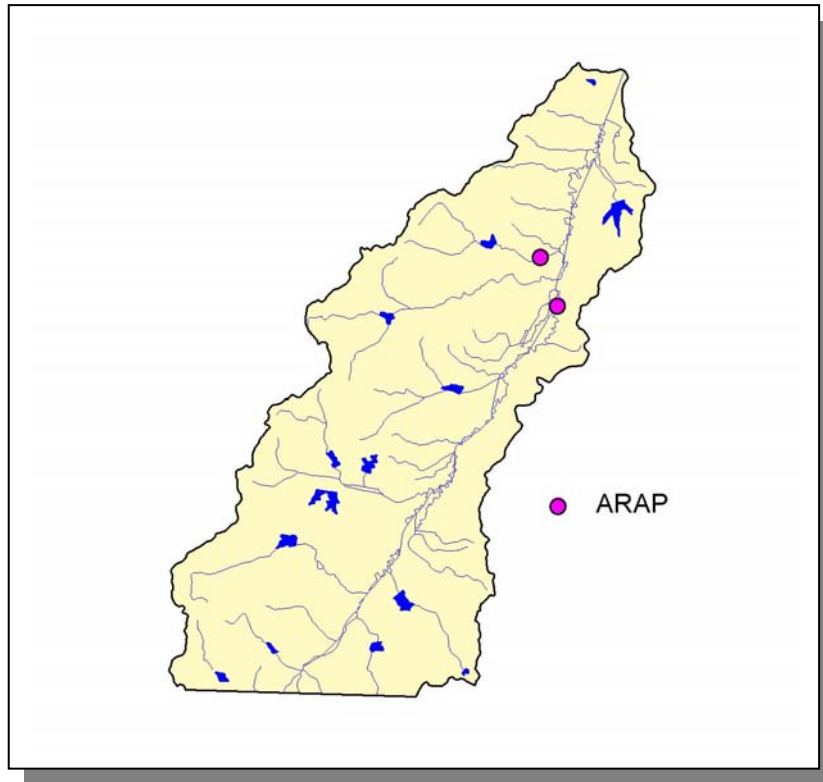


Figure 4-17. Location of Permits Issued in Subwatershed 080102080102. More information, including the names of facilities, is provided in Appendix IV.

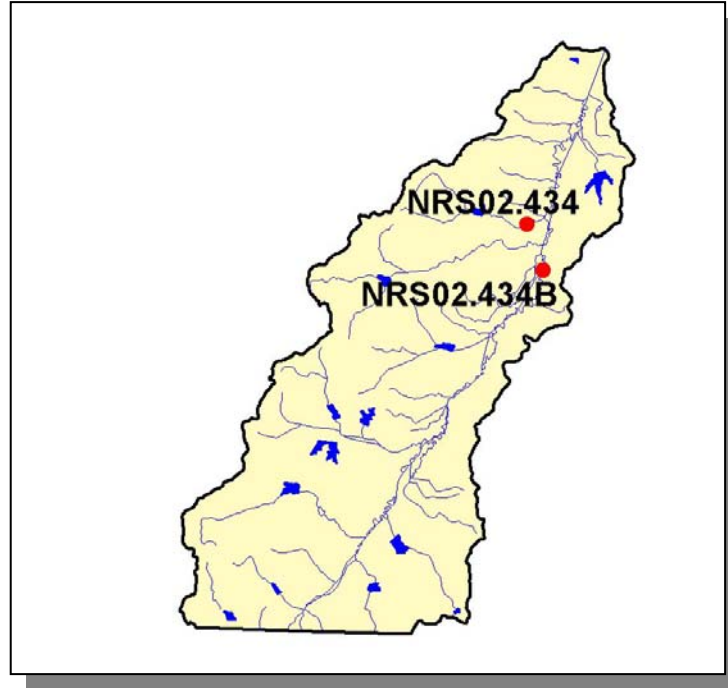


Figure 4-18. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080102. More information is provided in Appendix IV.

4.2.A.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
507	879	5	<5	271	8

Table 4-10. Summary of Livestock Count Estimates in Subwatershed 080102080102. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-11. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-12. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.44
Legumes (Hayland)	1.14
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.07
Cotton (Row Crops)	24.92
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.61
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.15
Conservation Reserve Program Lands	0.47
Farmsteads and Ranch Headquarters	0.95

Table 4-13. Annual Estimated Total Soil Loss in Subwatershed 080102080102.

4.2.A.iii. 080102080103 (Wade Creek).

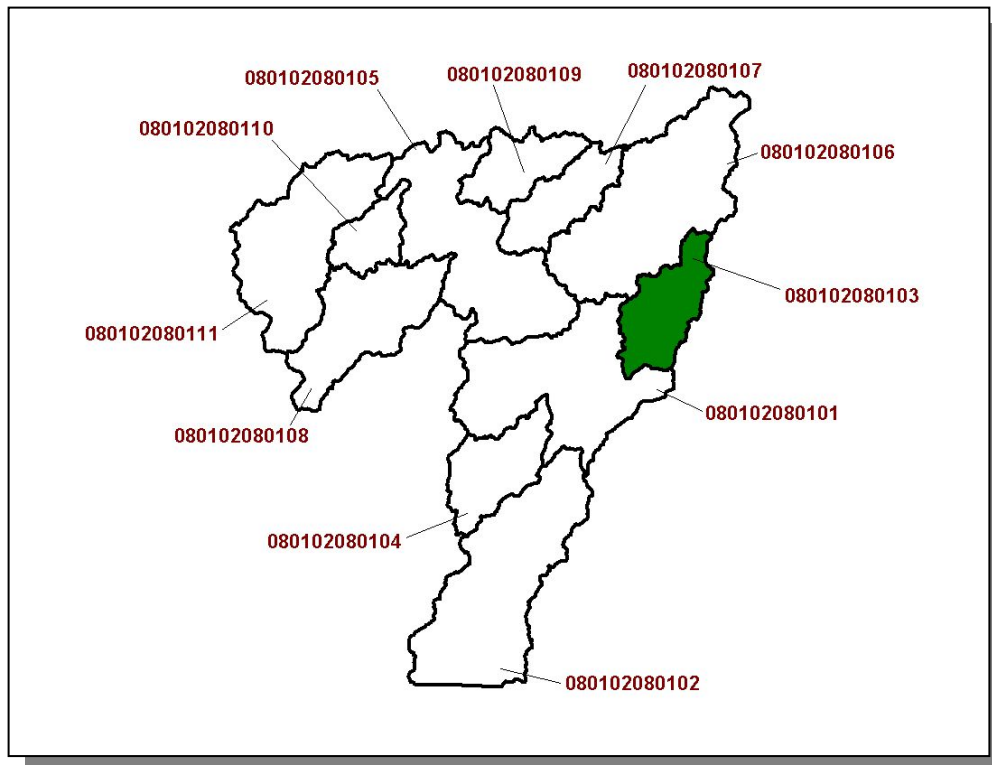


Figure 4-19. Location of Subwatershed 080102080103. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

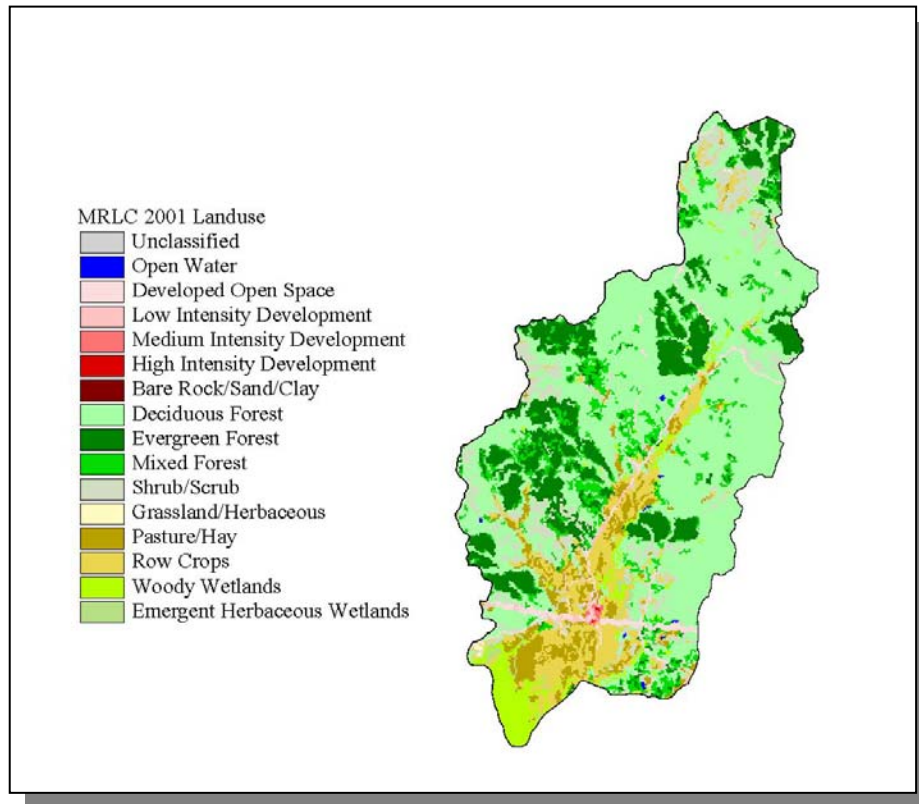


Figure 4-20. Illustration of Land Use Distribution in Subwatershed 080102080103.

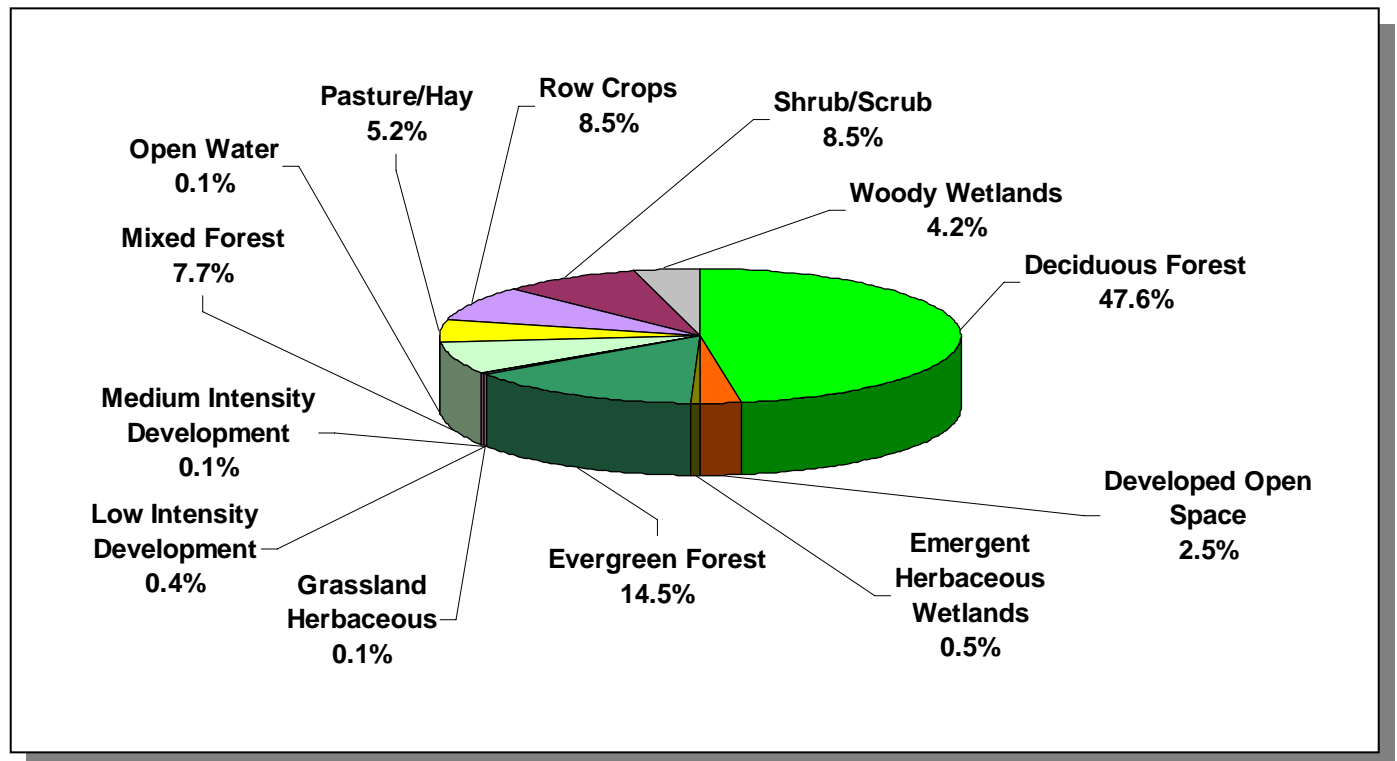


Figure 4-21. Land Use Distribution in Subwatershed 080102080103. More information is provided in Appendix IV.

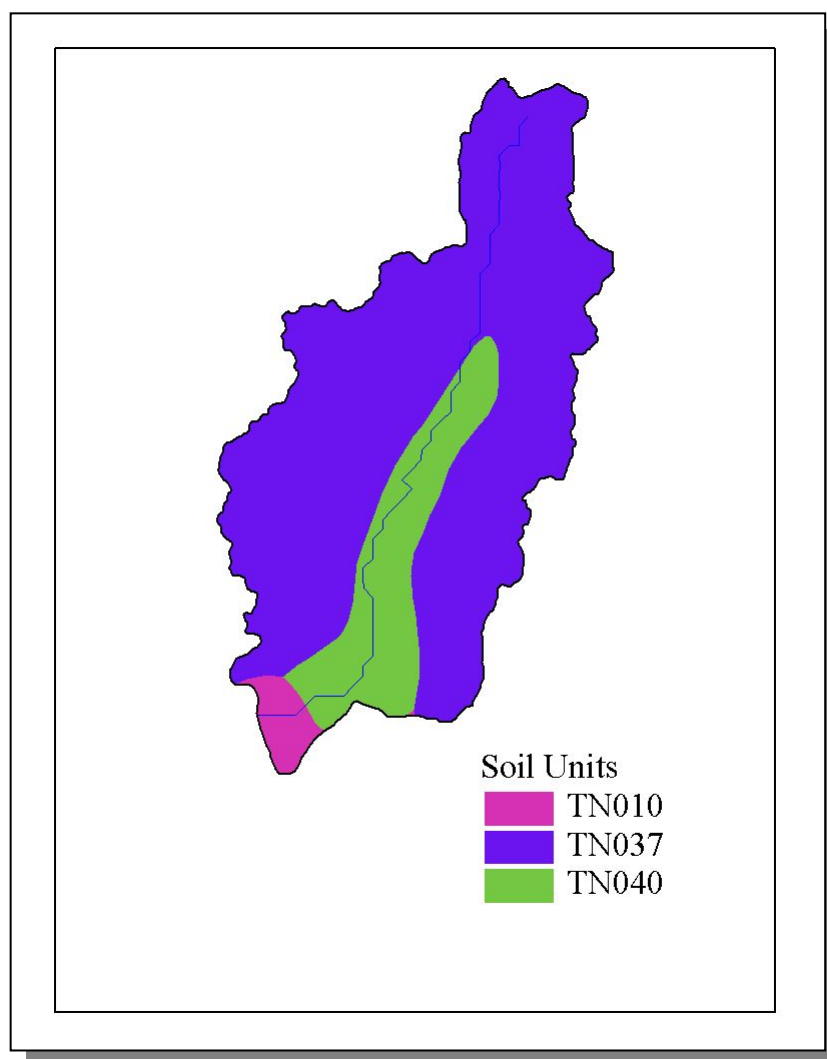


Figure 4-22. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080103.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN040	40.00	C	1.33	5.18	Silty Loam	0.38

Table 4-14. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080103. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Chester	12,819	14,469	15,540	0.31	40	46	49	22.5
Hardeman	23,377	24,702	28,105	2.32	543	574	653	20.3
Total	36,196	39,171	43,645		583	620	702	20.4

Table 4-15. Population Estimates in Subwatershed 080102080103.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Hornsby	Hardeman	293	128	8	115	5

Table 4-16. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080103.

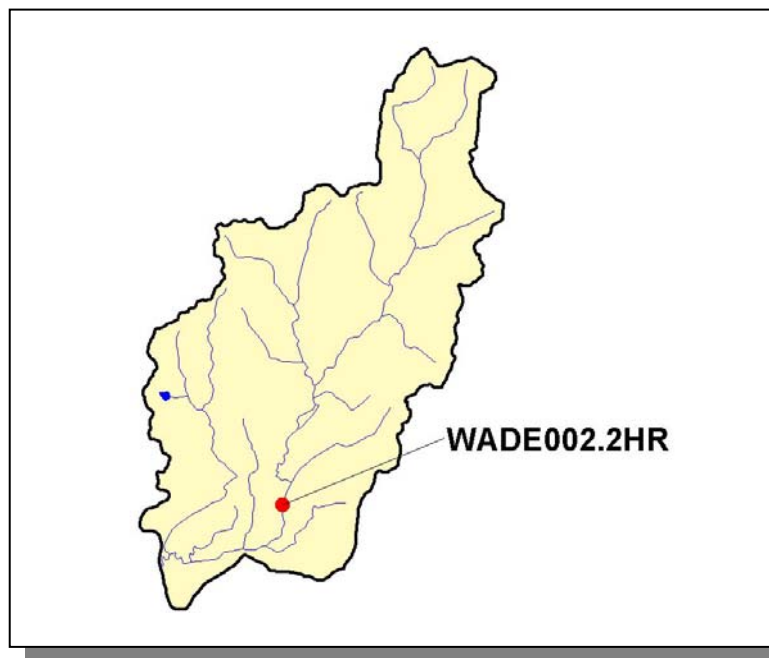


Figure 4-23. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080103. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iii.a. Point Source Contributions.

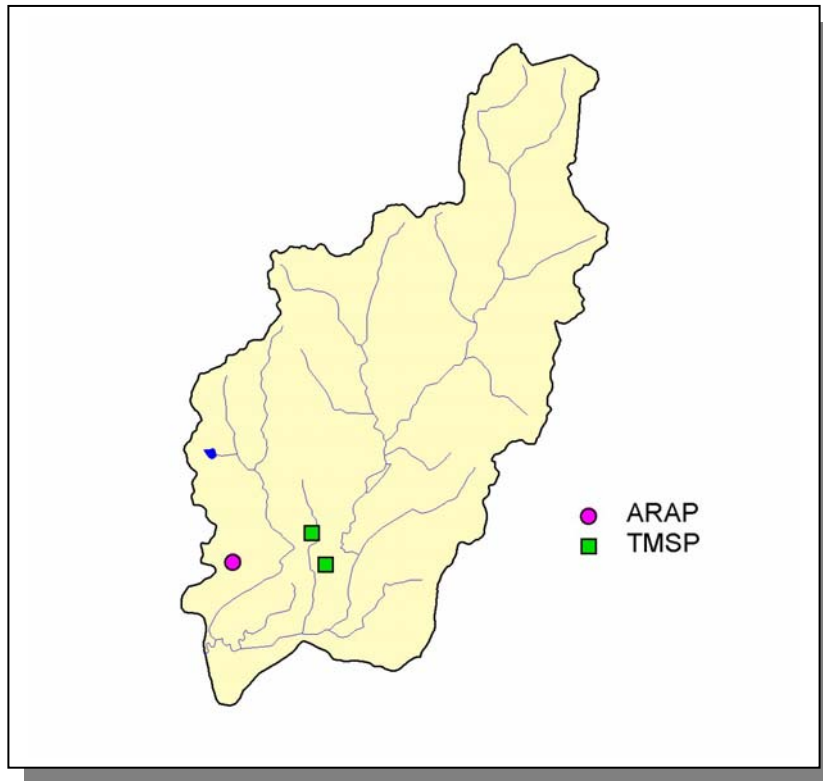


Figure 4-24. Location of Permits Issued in Subwatershed 080102080103. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-25. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080103. More information is provided in Appendix IV.



Figure 4-26. Location of TMSP Sites in Subwatershed 080102080103. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Milk Cow	Hogs	Sheep
82	144	<5	47	<5

Table 4-17. Summary of Livestock Count Estimates in Subwatershed 080102080103.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Chester	0	9,108	0	14	1,331	0
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-18. Summary of Livestock Count Estimates in Chester and Hardeman Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Chester	99.4	99.4	0.3	1.3
Hardeman	247.1	247.1	5.0	18.6

Table 4-19. Forest Acreage and Annual Removal Rates (1987-1994) in Chester and Hardeman Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.18
Grass (Hayland)	0.38
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	1.03
Corn (Row Crops)	11.33
Cotton (Row Crops)	25.45
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.51
Wheat (Close-Grown Cropland)	14.79
Other Vegetable and Truck Crops	28.15
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.01
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.92

Table 4-20. Annual Estimated Total Soil Loss in Subwatershed 080102080103.

4.2.A.iv. 080102080104 (Cub Creek).

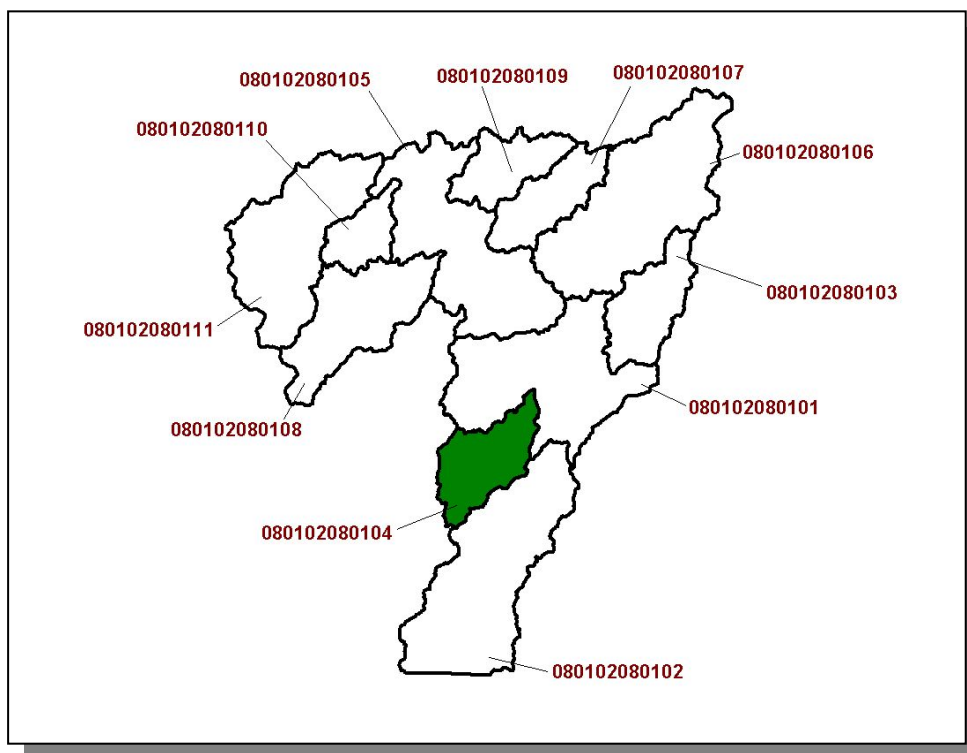


Figure 4-27. Location of Subwatershed 080102080104. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

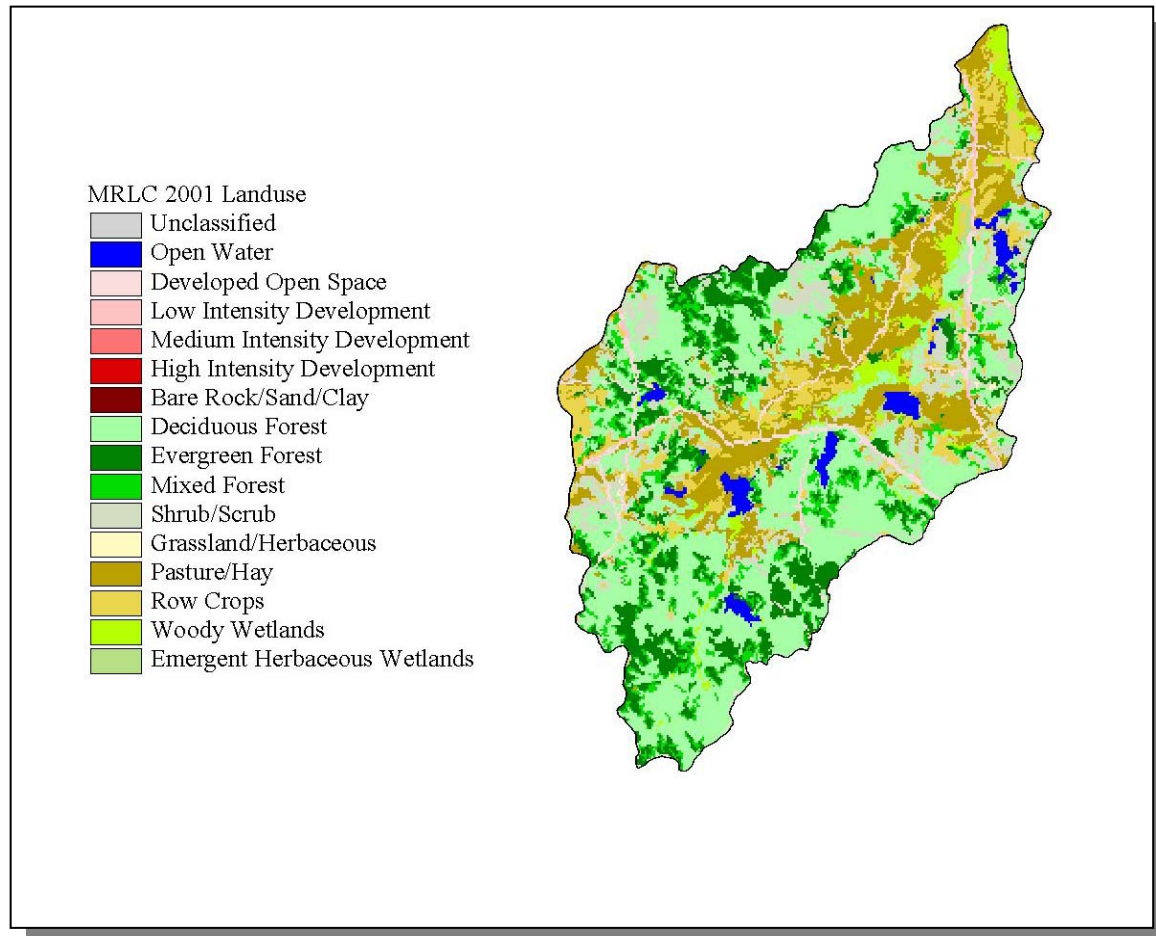


Figure 4-28. Illustration of Land Use Distribution in Subwatershed 080102080104.

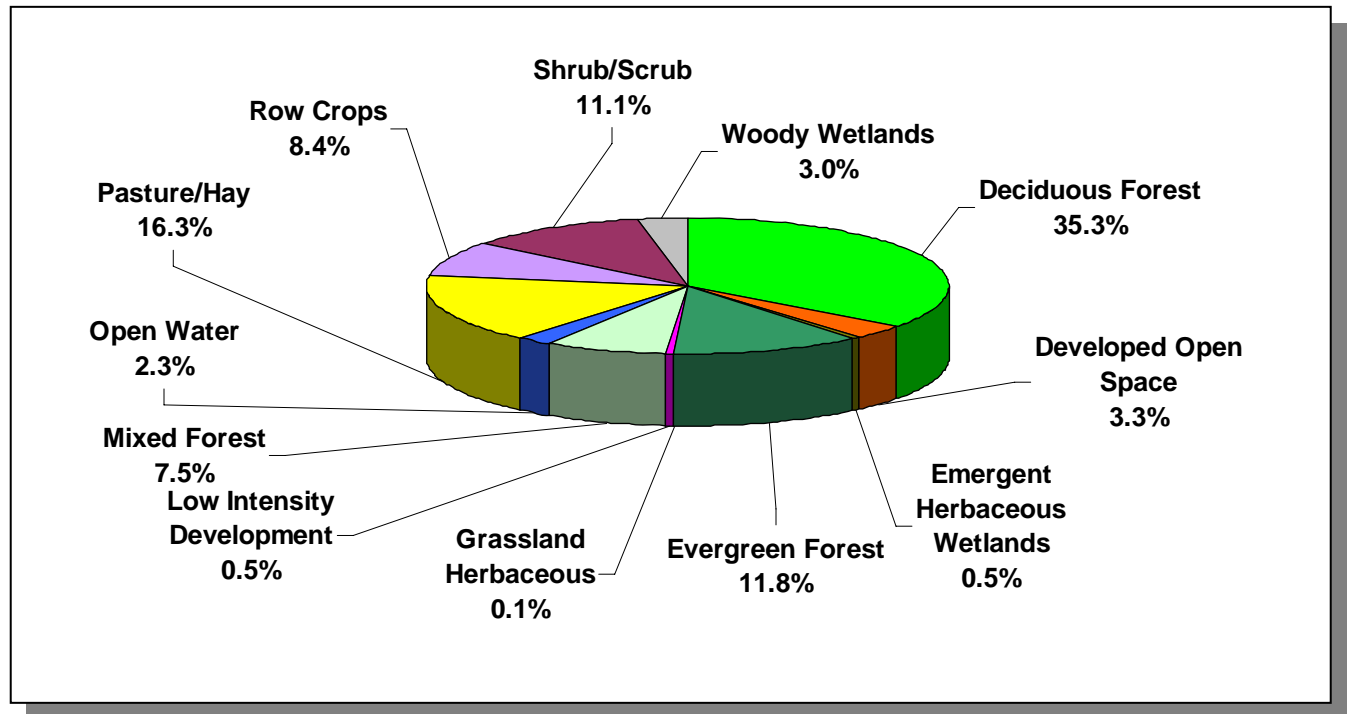


Figure 4-29. Land Use Distribution in Subwatershed 080102080104. More information is provided in Appendix IV.

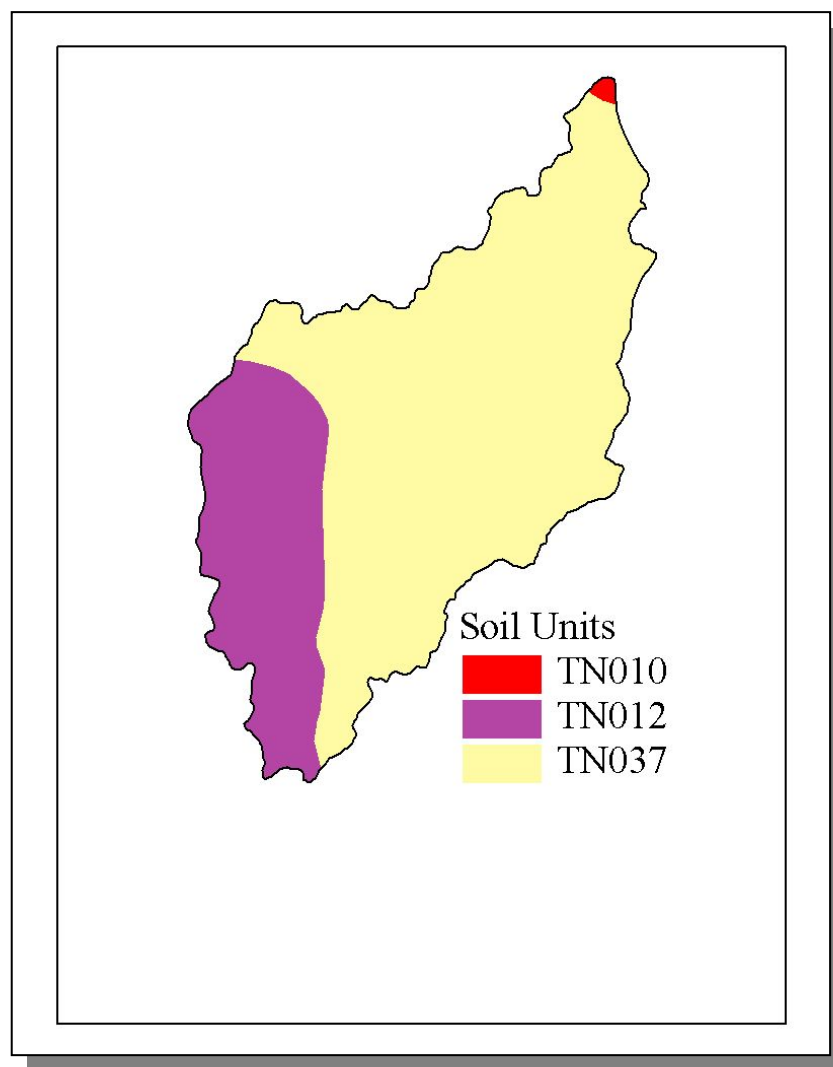


Figure 4-30. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080104.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27

Table 4-21. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080104. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	2.43	569	601	684	20.2

Table 4-22. Population Estimates in Subwatershed 080102080104.

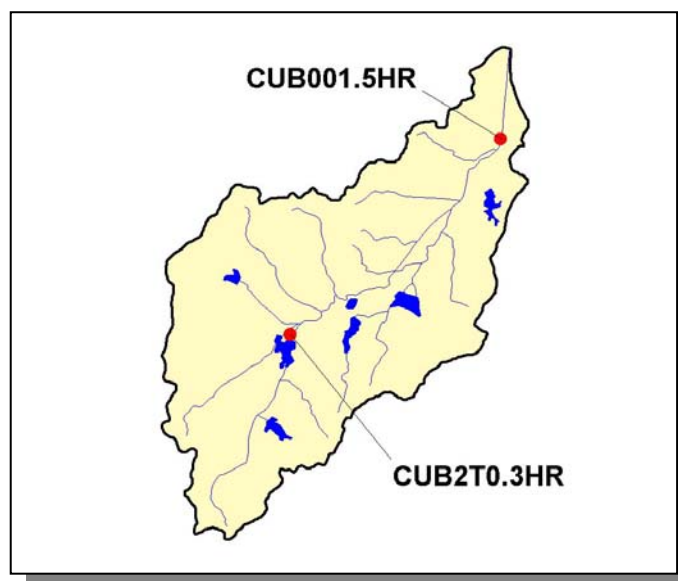


Figure 4-31. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080104. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
197	340	<5	<5	112	<5

Table 4-23. Summary of Livestock Count Estimates in Subwatershed 080102080104. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-24. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-25. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-26. Annual Estimated Total Soil Loss in Subwatershed 080102080104.

4.2.A.v. 080102080105 (Hatchie River).

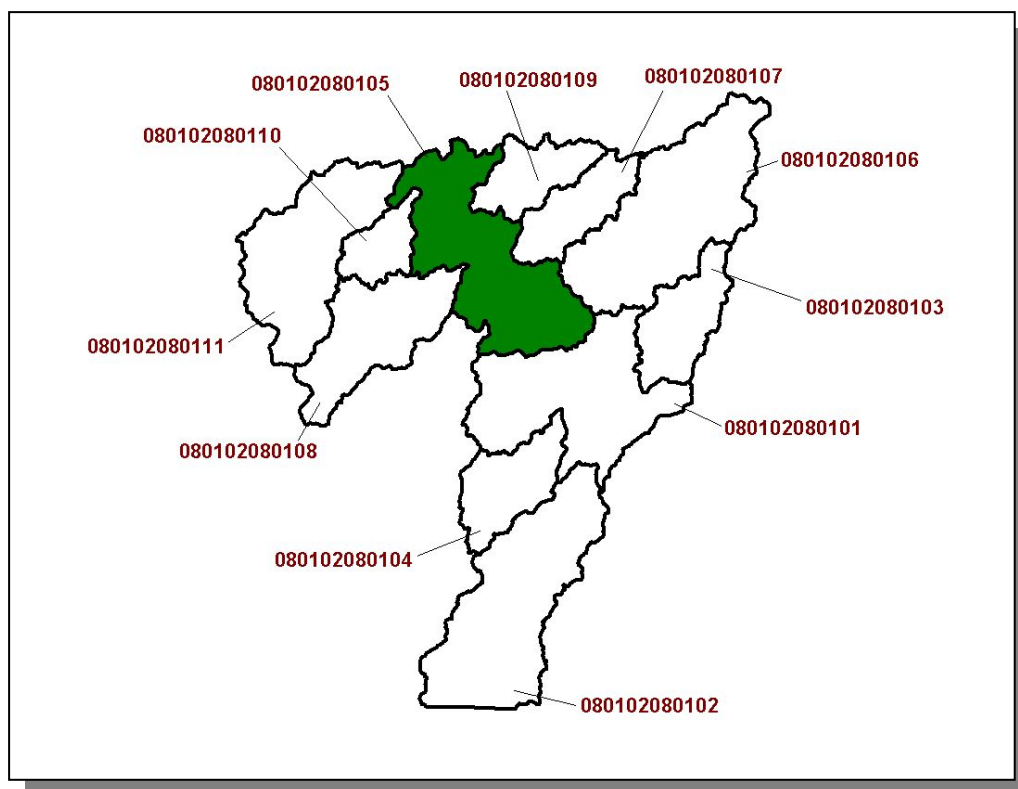


Figure 4-32. Location of Subwatershed 080102080105. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

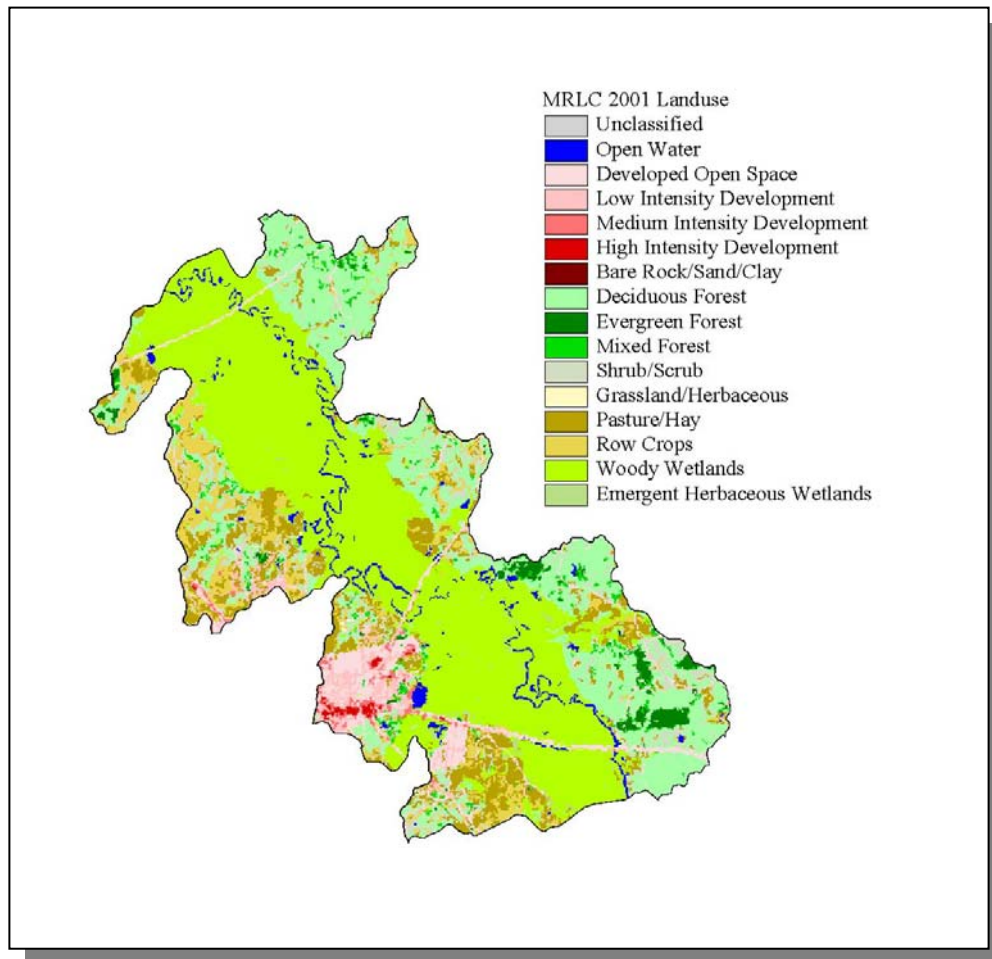


Figure 4-33. Illustration of Land Use Distribution in Subwatershed 080102080105.

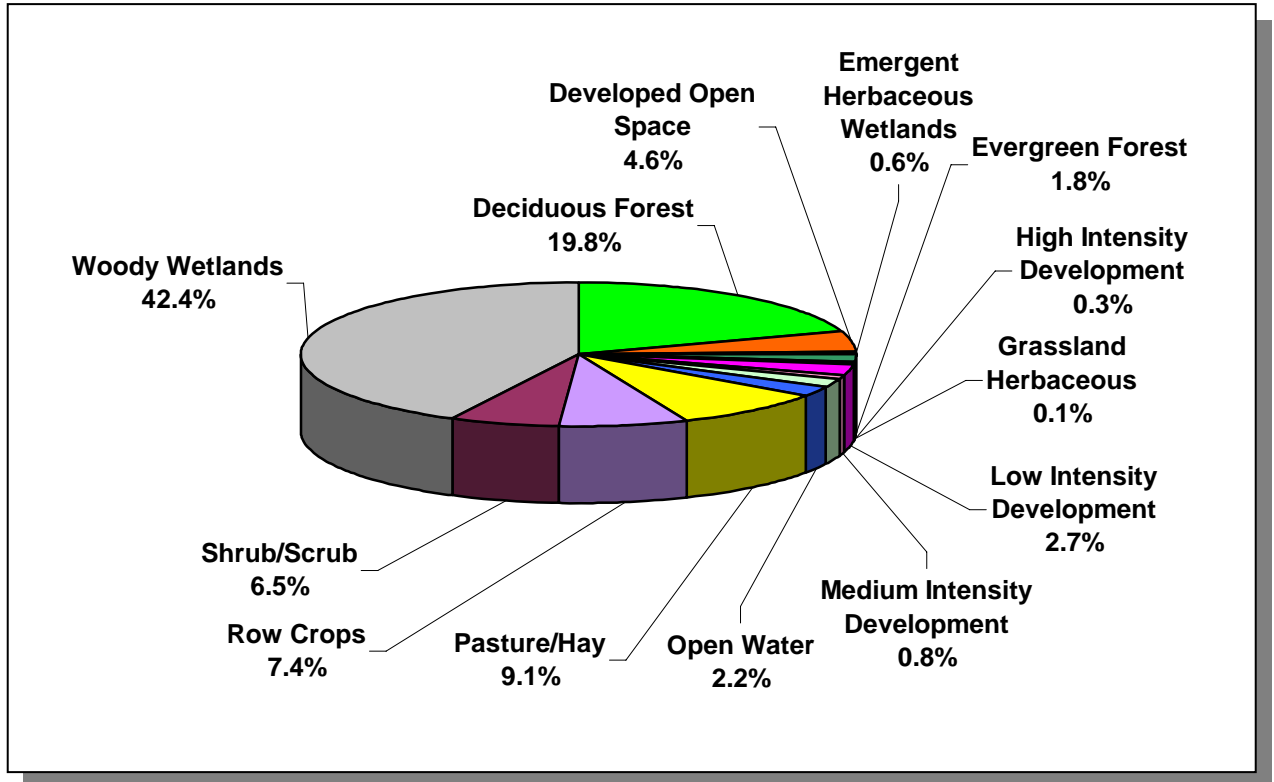


Figure 4-34. Land Use Distribution in Subwatershed 080102080105. More information is provided in Appendix IV.

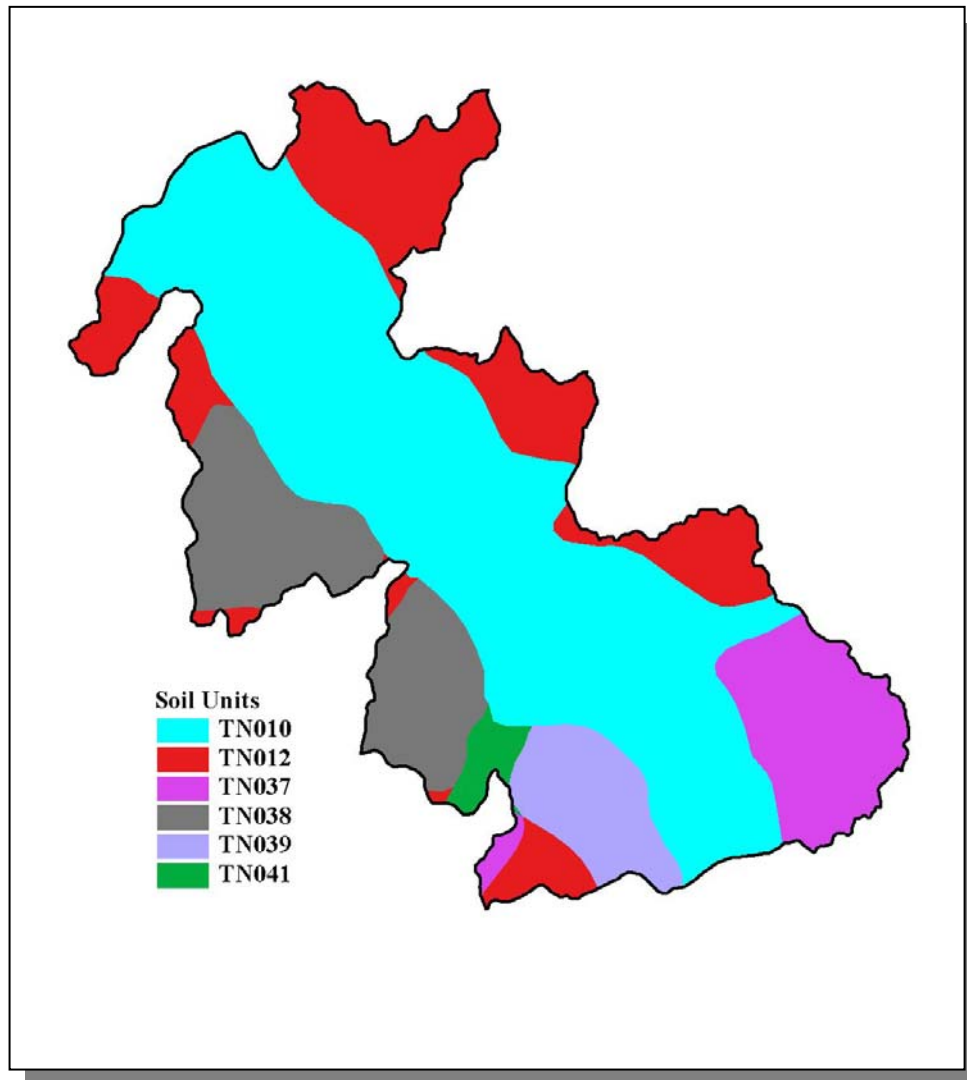


Figure 4-35. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080105.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN038	9.00	C	1.65	5.20	Silty Loam	0.46
TN039	24.00	C	1.35	5.20	Silty Loam	0.47
TN041	59.00	C	1.35	4.98	Silty Loam	0.34

Table 4-27. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080105. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	6.32	1,477	1,561	1,776	20.2

Table 4-28. Population Estimates in Subwatershed 080102080105.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Bolivar	Hardeman	5,969	2,098	1,915	161	22
Toone	Hardeman	279	102	69	33	0
Total		6,248	2,200	1,984	194	22

Table 4-29. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080105.

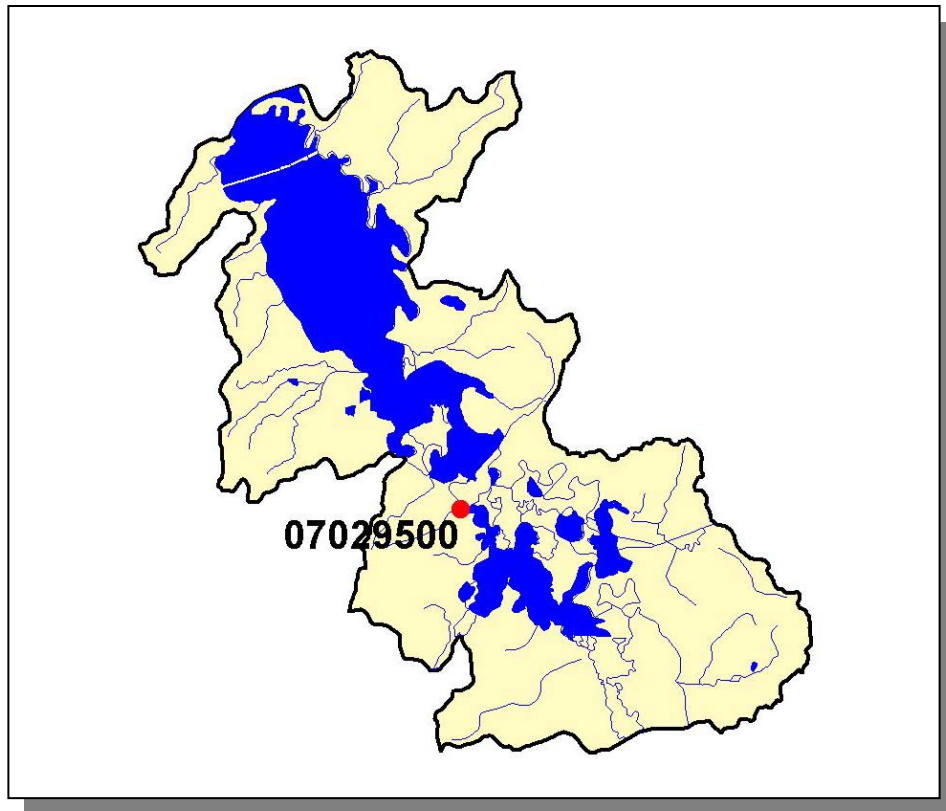


Figure 4-36. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080105. More information is provided in Appendix IV.

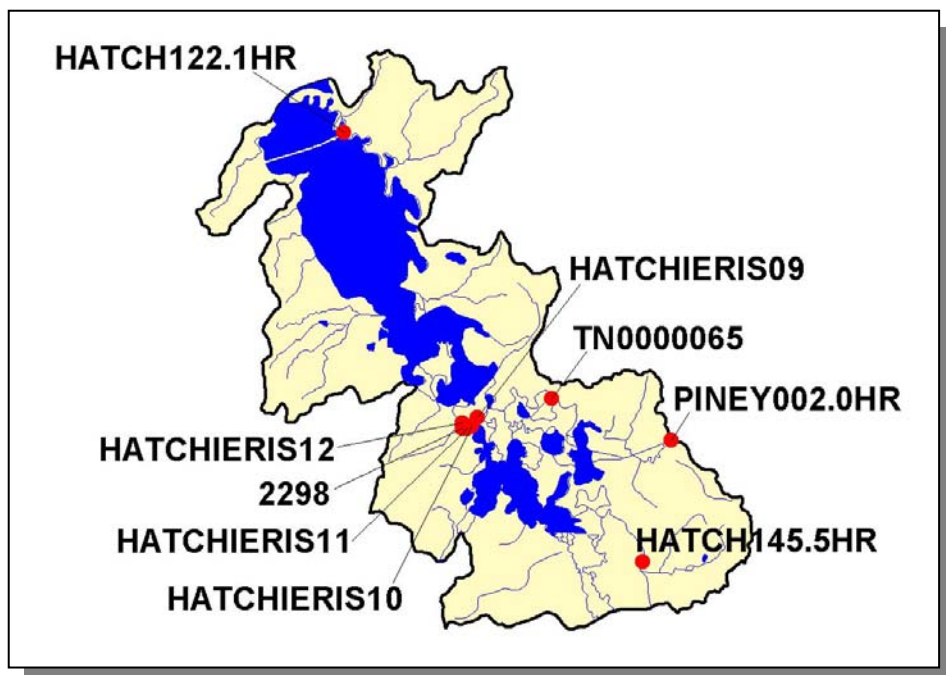


Figure 4-37. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080105. More information, including site names and locations, is provided in Appendix IV.

4.2.A.v.a. Point Source Contributions.

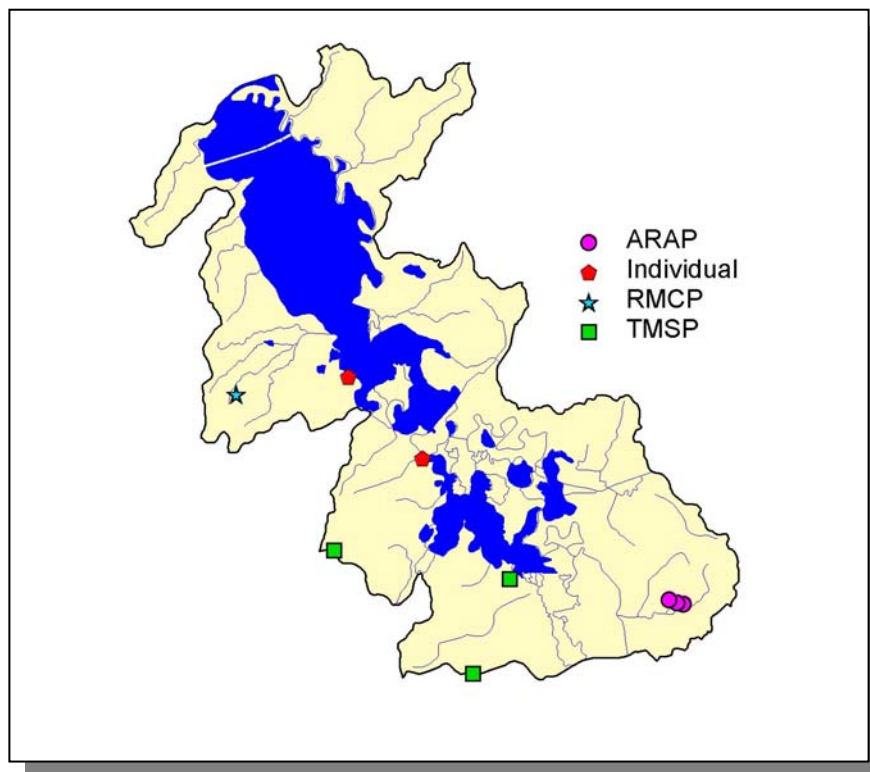


Figure 4-38. Location of Permits Issued in Subwatershed 080102080105. More information, including the names of facilities, is provided in Appendix IV.

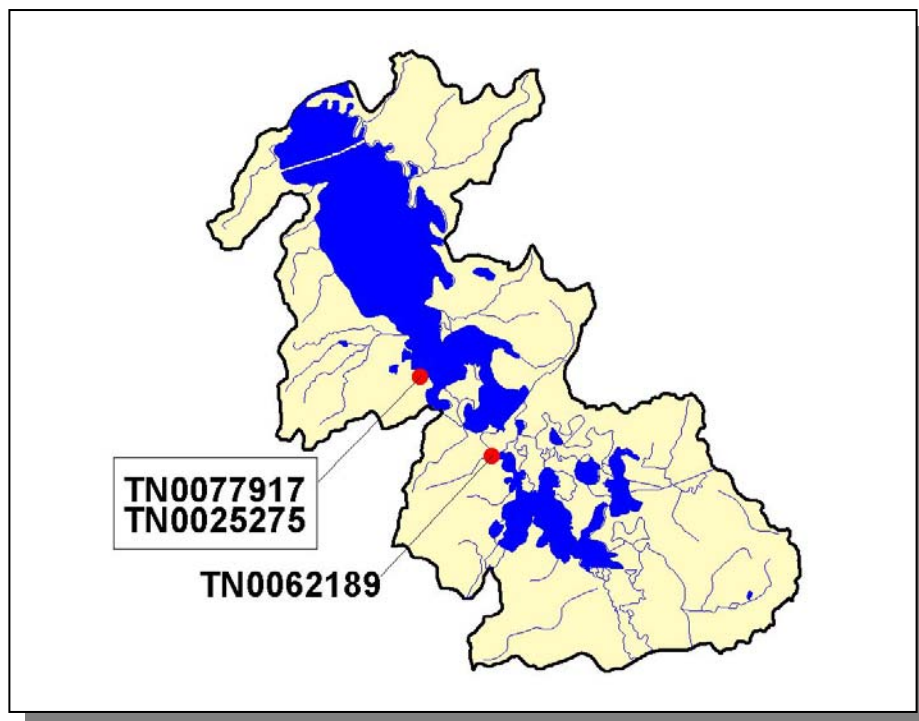


Figure 4-39. Location of Active NPDES Sites in Subwatershed 080102080105. More information, including the names of facilities, is provided in Appendix IV.

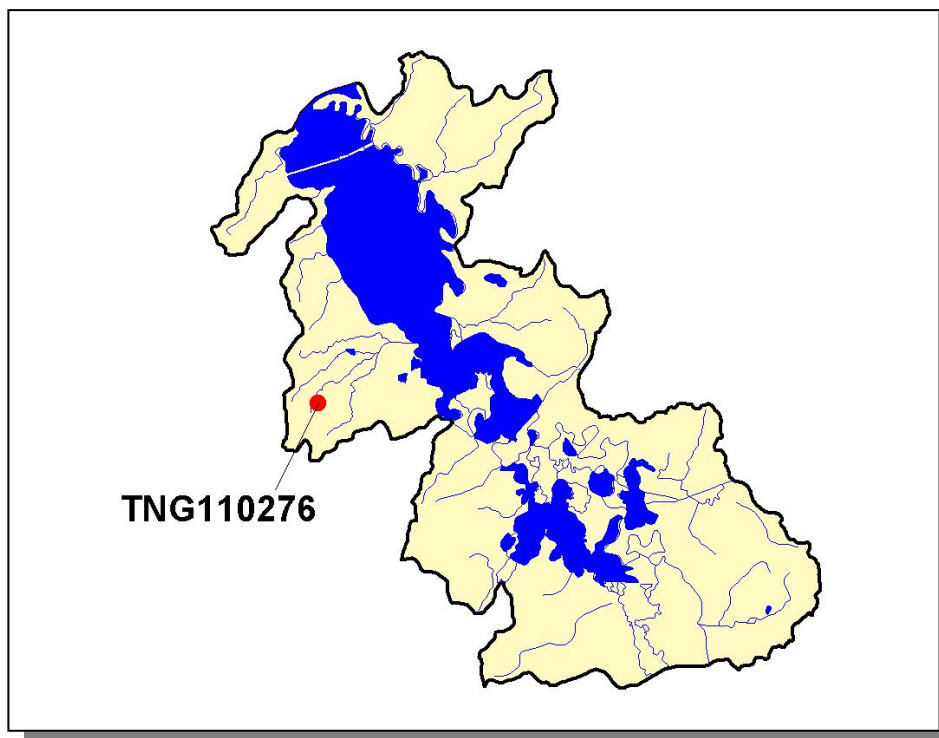


Figure 4-40. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 080102080105. More information is provided in Appendix IV.

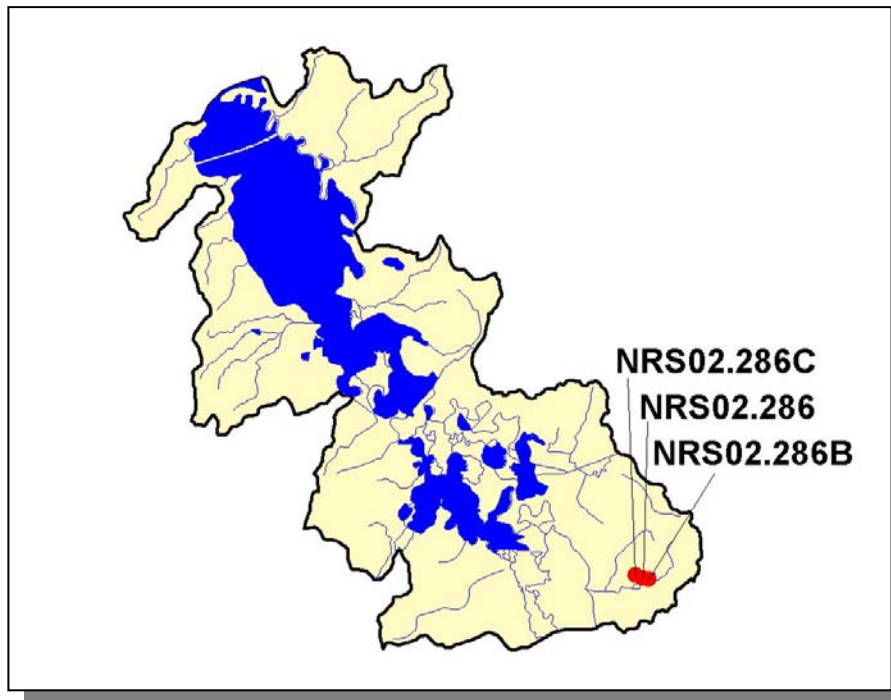


Figure 4-41. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080105. More information is provided in Appendix IV.

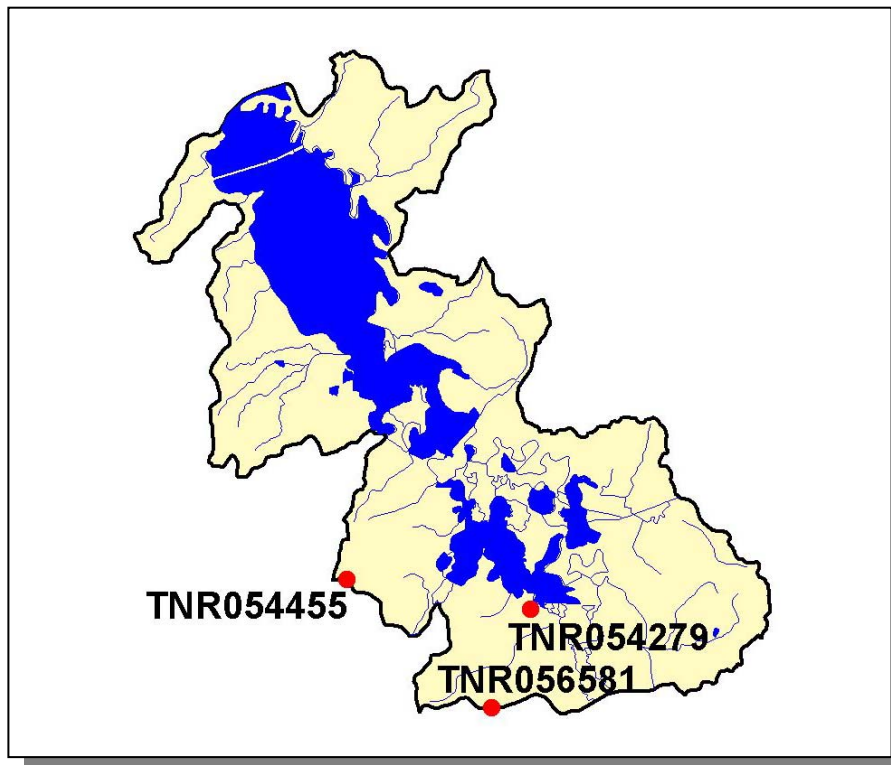


Figure 4-42. Location of TMSP Sites in Subwatershed 080102080105. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
413	713	<5	<5	235	6

Table 4-30. Summary of Livestock Count Estimates in Subwatershed 080102080105. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-31. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-32. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-33. Annual Estimated Total Soil Loss in Subwatershed 080102080105.

4.2.A.vi. 080102080106 (Piney Creek).

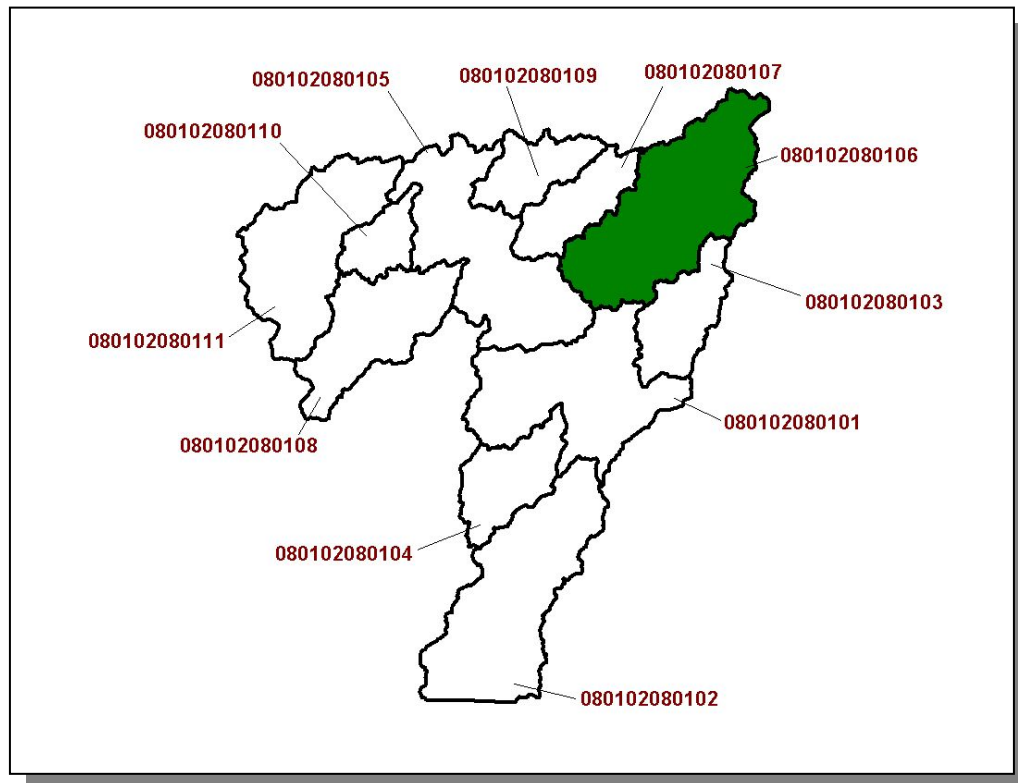


Figure 4-43. Location of Subwatershed 080102080106. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

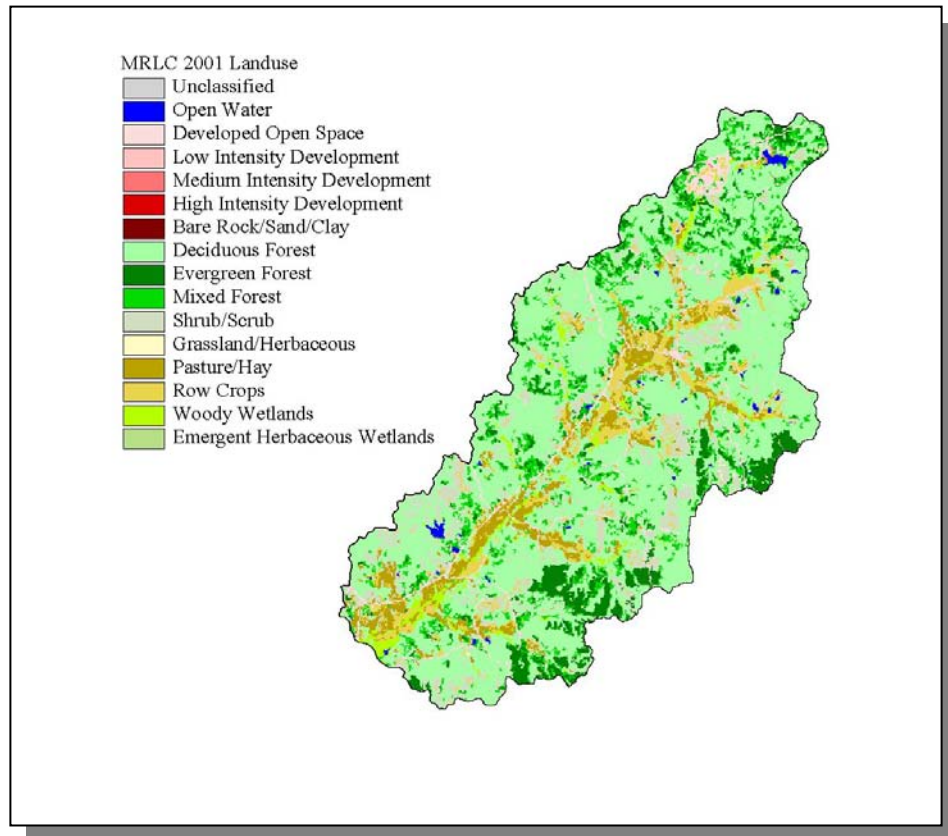


Figure 4-44. Illustration of Land Use Distribution in Subwatershed 080102080106.

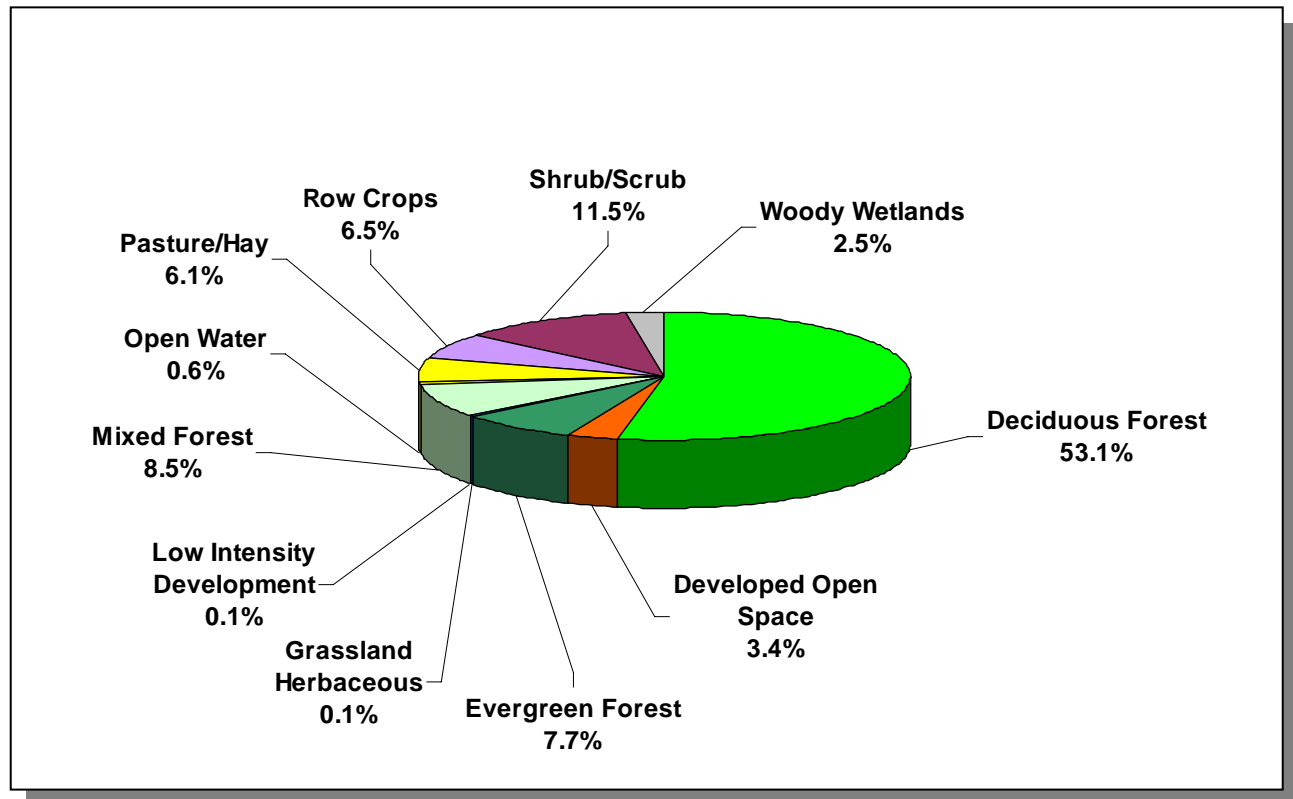


Figure 4-45. Land Use Distribution in Subwatershed 080102080106. More information is provided in Appendix IV.

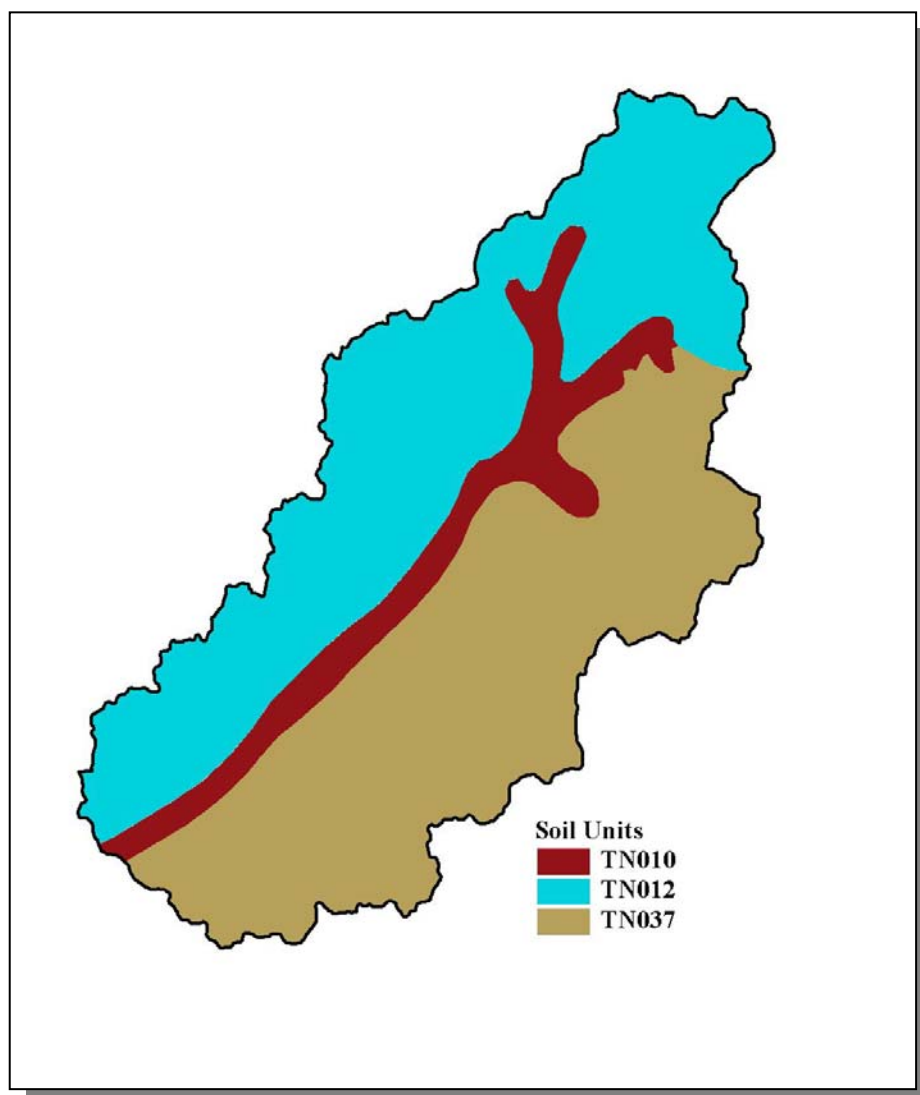


Figure 4-46. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080106.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27

Table 4-34. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080106. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Chester	12,819	14,469	15,540	4.89	627	708	760	21.2
Hardeman	23,377	24,702	28,105	4.86	1,136	1,201	1,366	20.2
Total	36,196	39,171	43,645		1,763	1,909	2,126	20.6

Table 4-35. Population Estimates in Subwatershed 080102080106.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Silerton	Hardeman	50	45	0	45	0

Table 4-36. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080106.

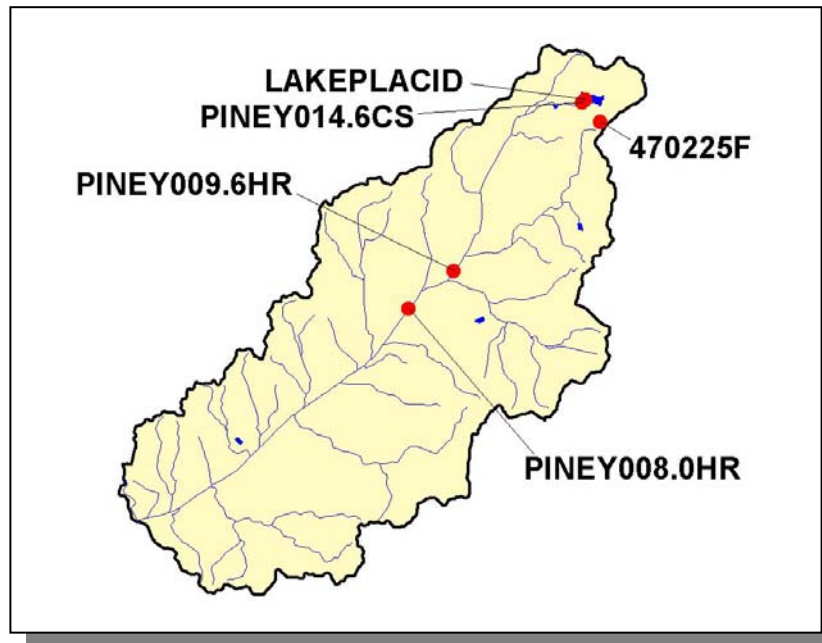


Figure 4-47. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080106. More information, including site names and locations, is provided in Appendix IV.

4.2.A.vi.a. Point Source Contributions.

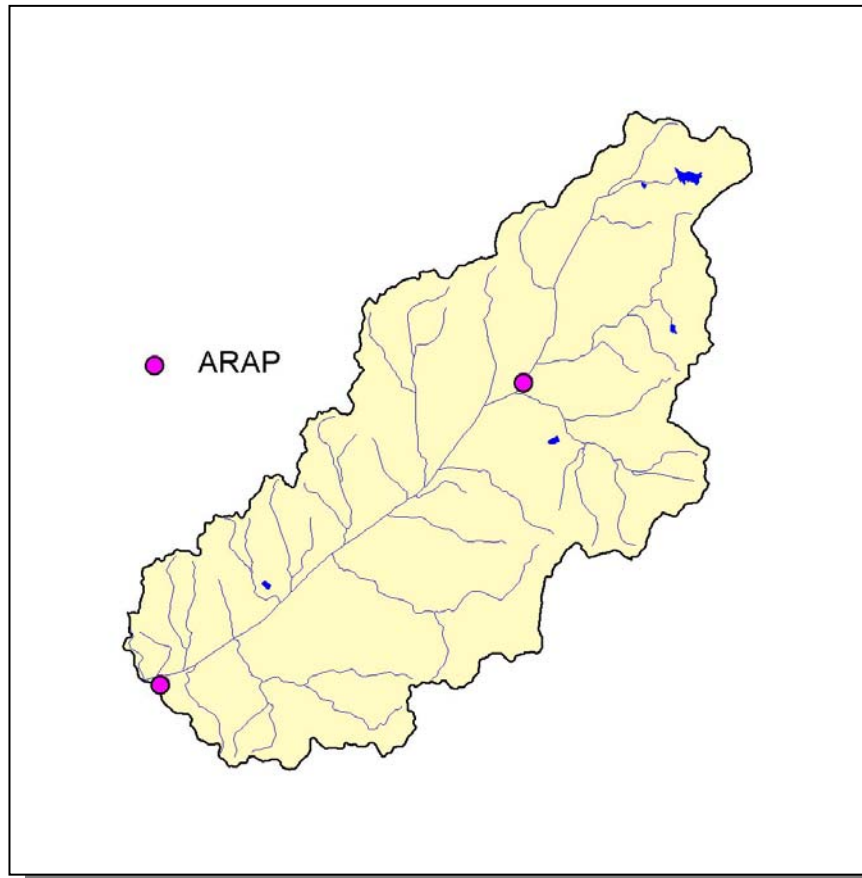


Figure 4-48. Location of Permits Issued in Subwatershed 080102080106. More information, including the names of facilities, is provided in Appendix IV.

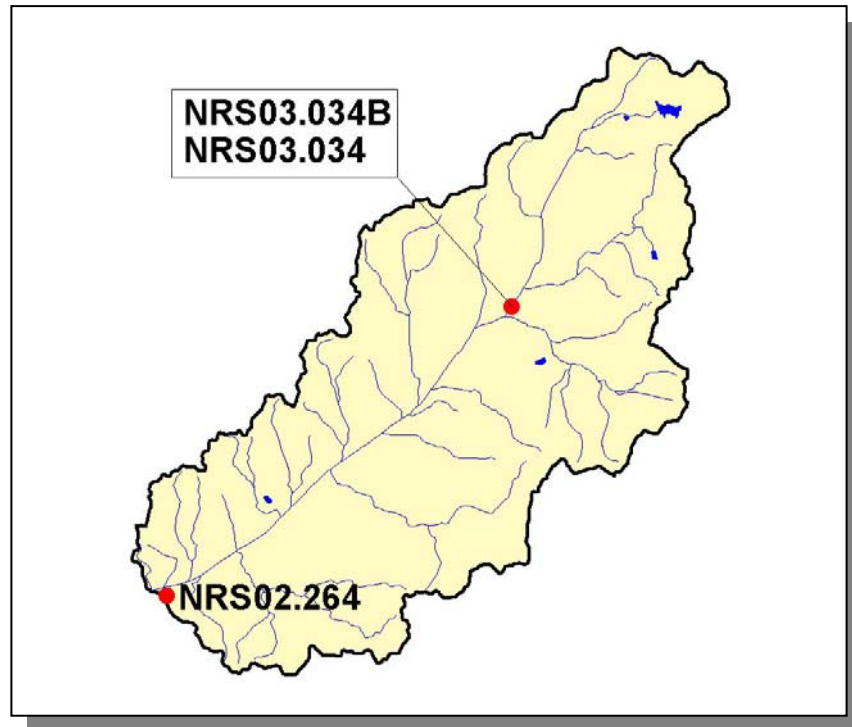


Figure 4-49. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080106. More information is provided in Appendix IV.

4.2.A.vi.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
196	656	<5	<5	158	<5

Table 4-37. Summary of Livestock Count Estimates in Subwatershed 080102080106.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Chester	0	9,108	0	14	1,331	0
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-38. Summary of Livestock Count Estimates in Chester and Hardeman Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Chester	99.4	99.4	0.3	1.3
Hardeman	247.1	247.1	5.0	18.6

Table 4-39. Forest Acreage and Annual Removal Rates (1987-1994) in Chester and Hardeman Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.96
Grass (Hayland)	0.36
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.86
Corn (Row Crops)	10.98
Cotton (Row Crops)	23.94
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	10.84
Wheat (Close-Grown Cropland)	13.69
Other Vegetable and Truck Crops	28.15
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	3.01
Conservation Reserve Program Lands	0.32
Farmsteads and Ranch Headquarters	0.70

Table 4-40. Annual Estimated Total Soil Loss in Subwatershed 080102080106.

4.2.A.vii. 080102080107 (Grays Creek).

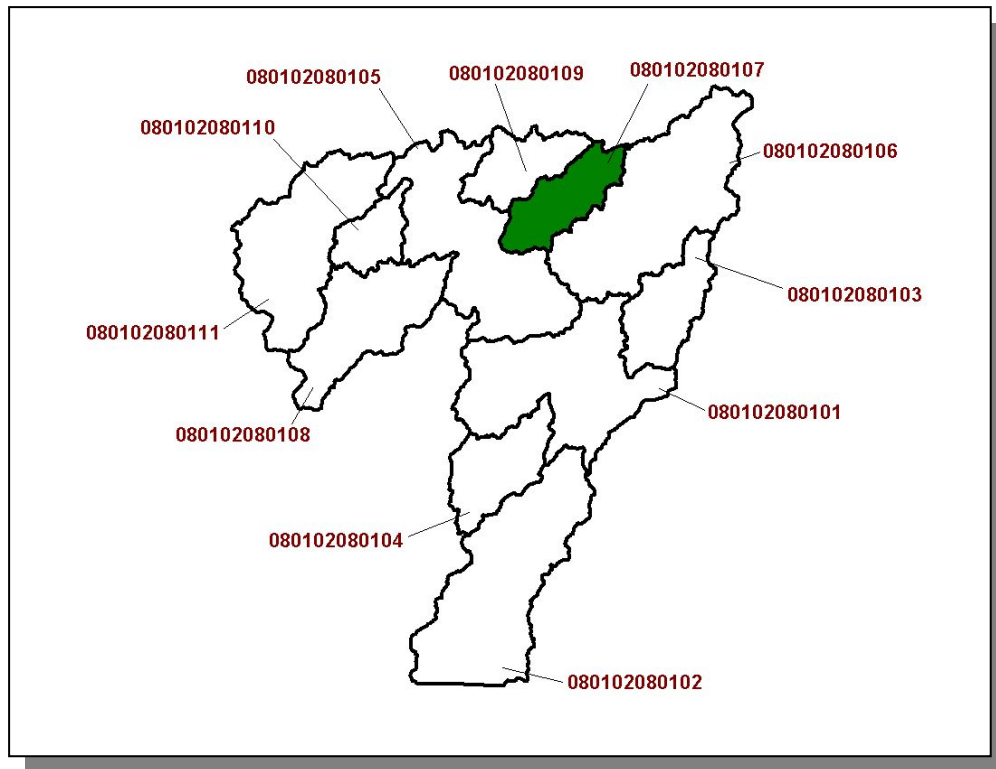


Figure 4-50. Location of Subwatershed 080102080107. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

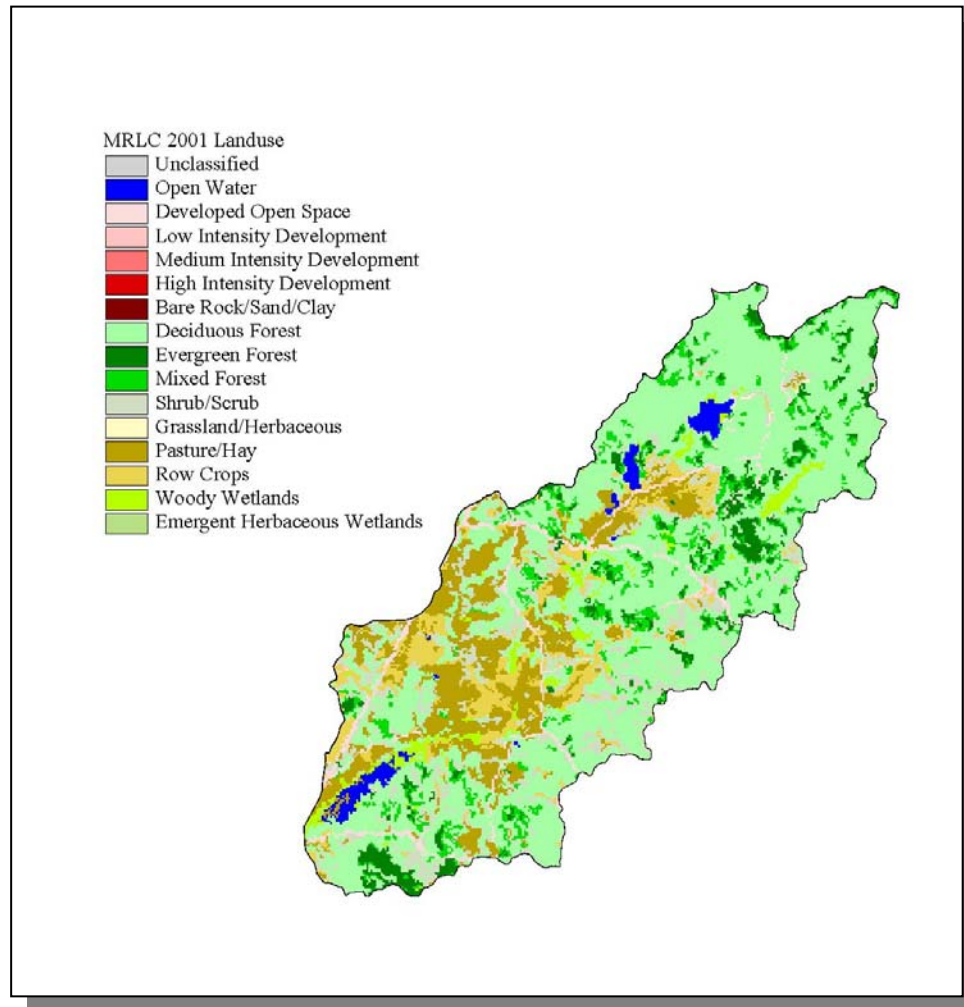


Figure 4-51. Illustration of Land Use Distribution in Subwatershed 080102080107.

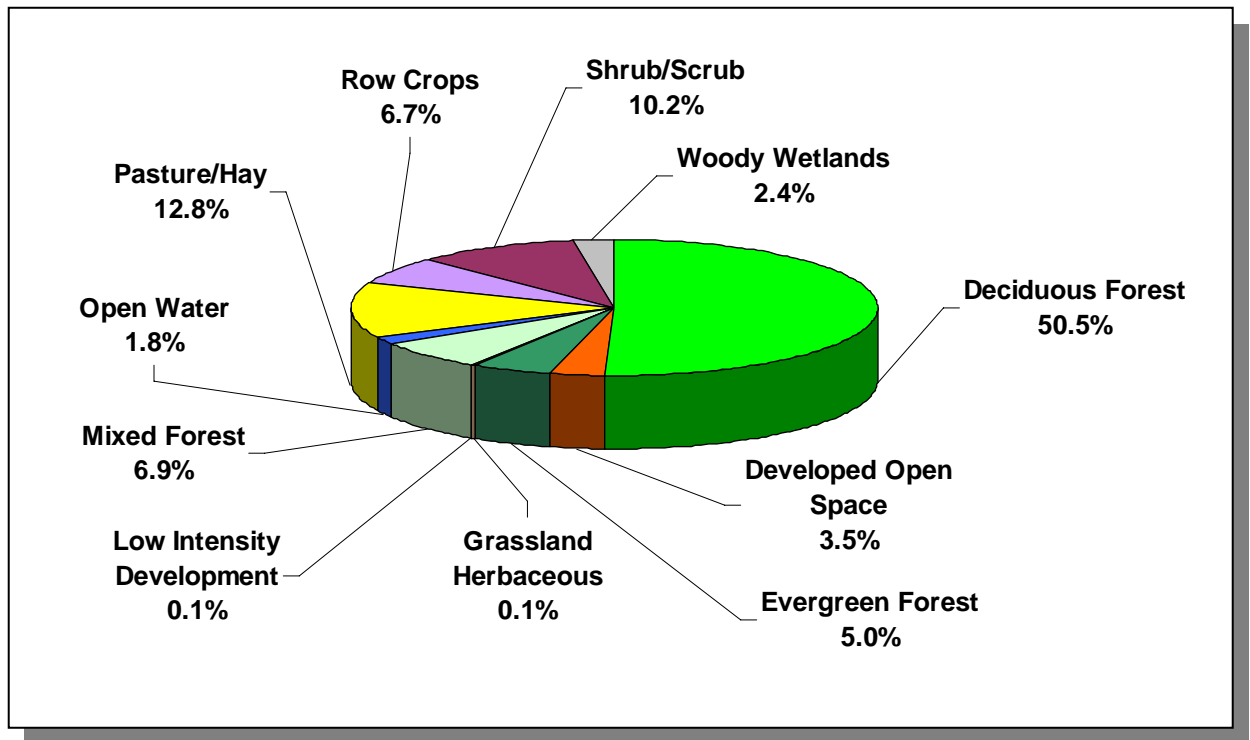


Figure 4-52. Land Use Distribution in Subwatershed 080102080107. More information is provided in Appendix IV.

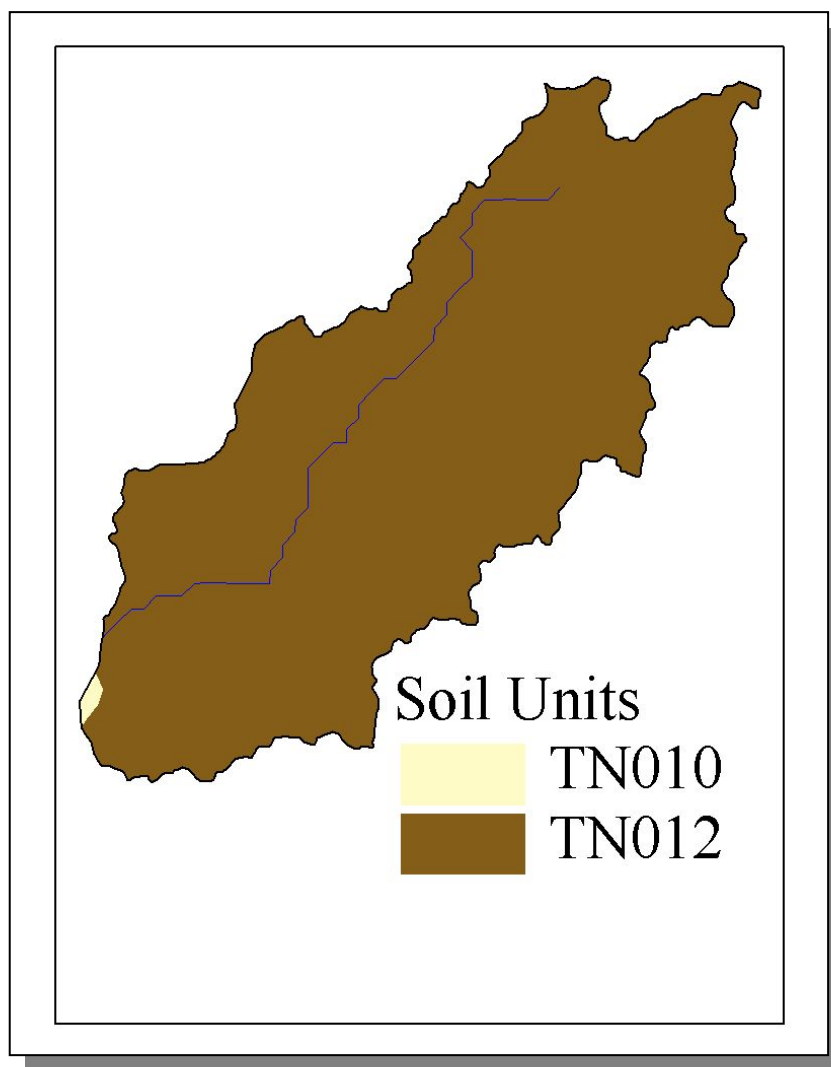


Figure 4-53. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080107.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39

Table 4-41. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080107. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	2.17	508	537	611	20.3

Table 4-42. Population Estimates in Subwatershed 080102080107.

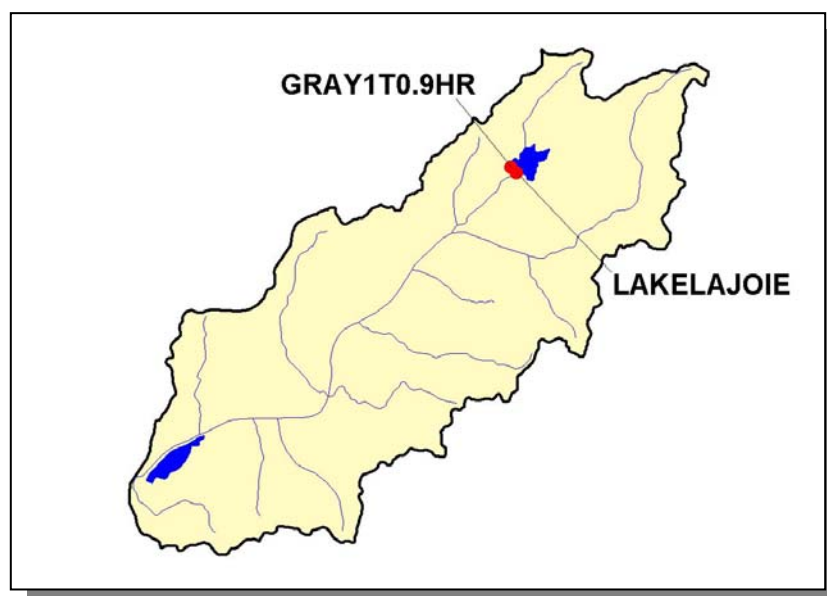


Figure 4-54. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080107. More information, including site names and locations, is provided in Appendix IV.

4.2.A.vii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.vii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
206	355	<5	<5	117	<5

Table 4-43. Summary of Livestock Count Estimates in Subwatershed 080102080107. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-44. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-45. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-46. Annual Estimated Total Soil Loss in Subwatershed 080102080107.

4.2.A.viii. 080102080108 (Pleasant Run Creek).

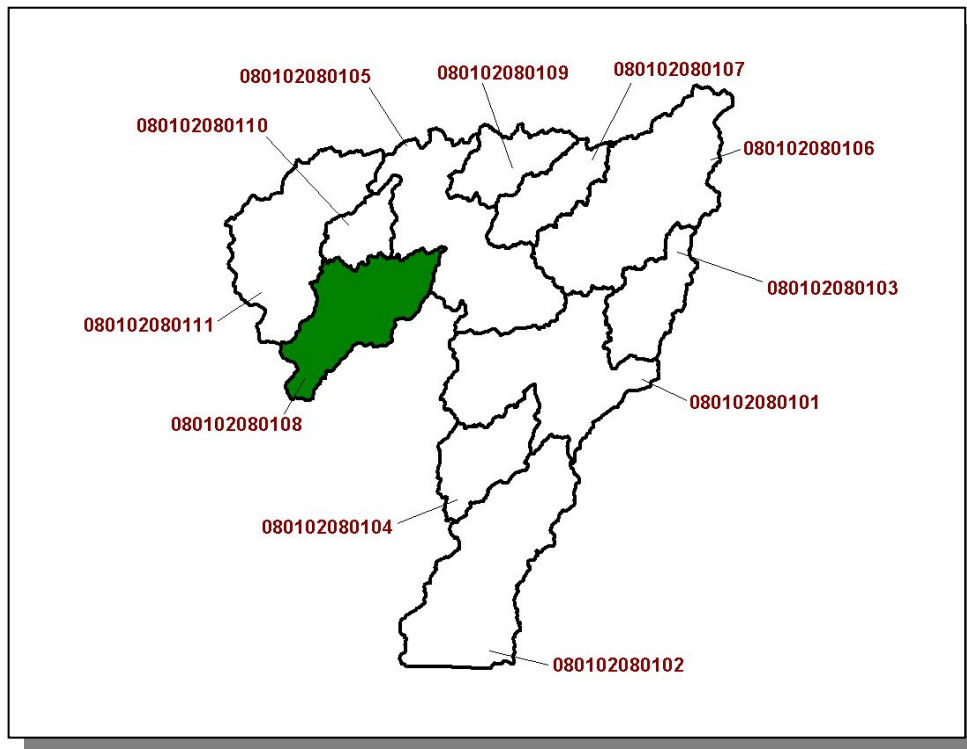


Figure 4-55. Location of Subwatershed 080102080108. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

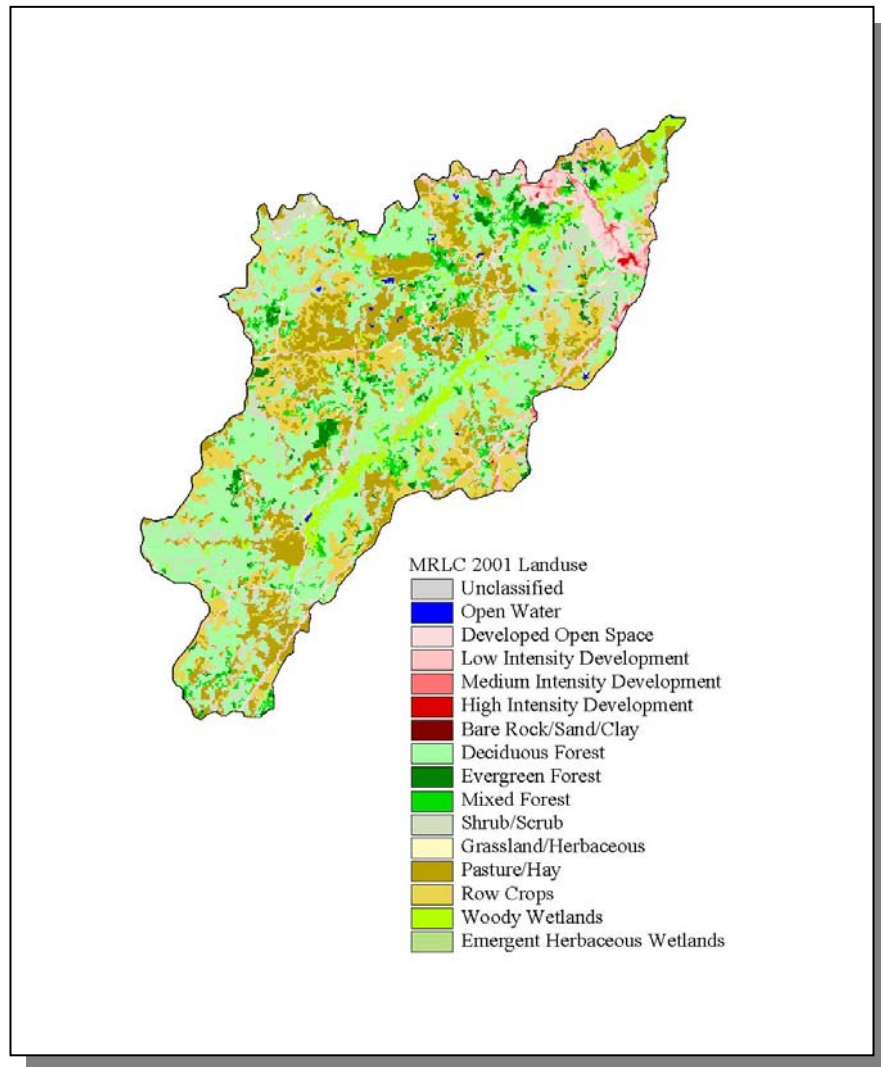


Figure 4-56. Illustration of Land Use Distribution in Subwatershed 080102080108.

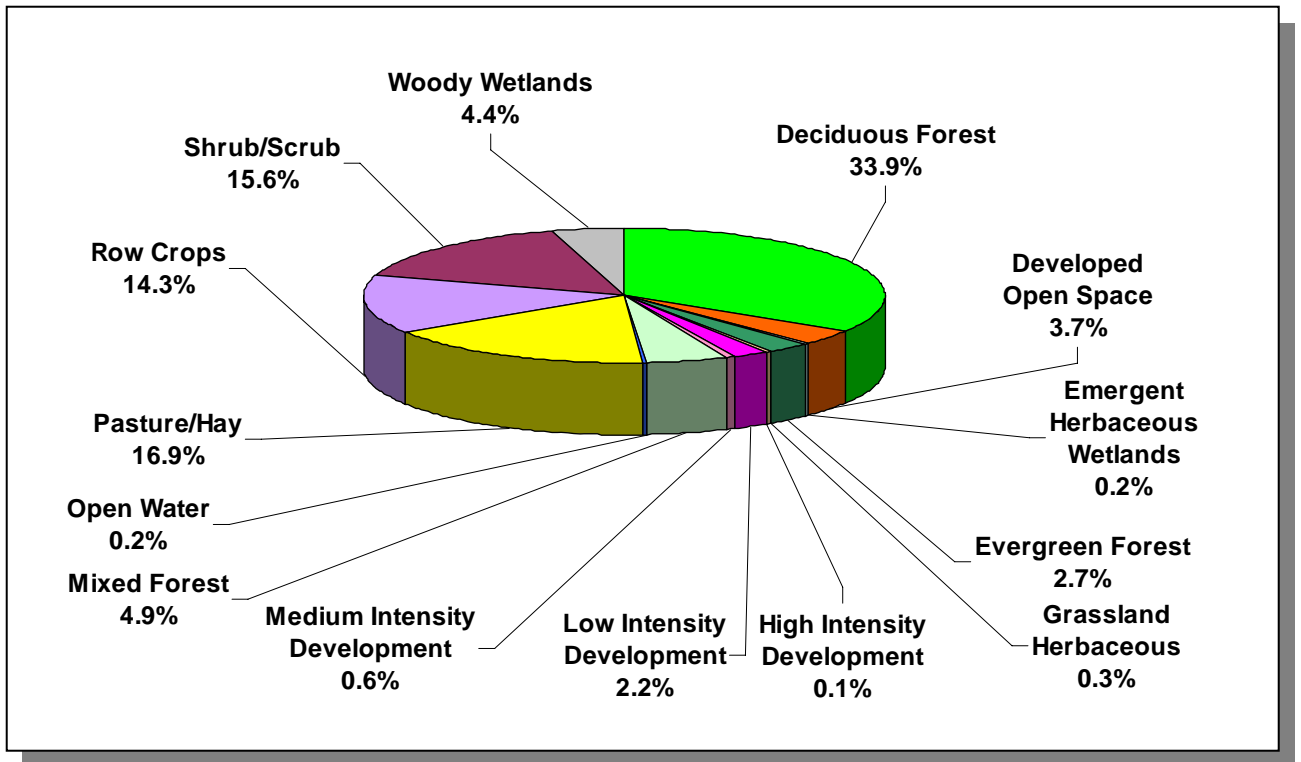


Figure 4-57. Land Use Distribution in Subwatershed 080102080108. More information is provided in Appendix IV.

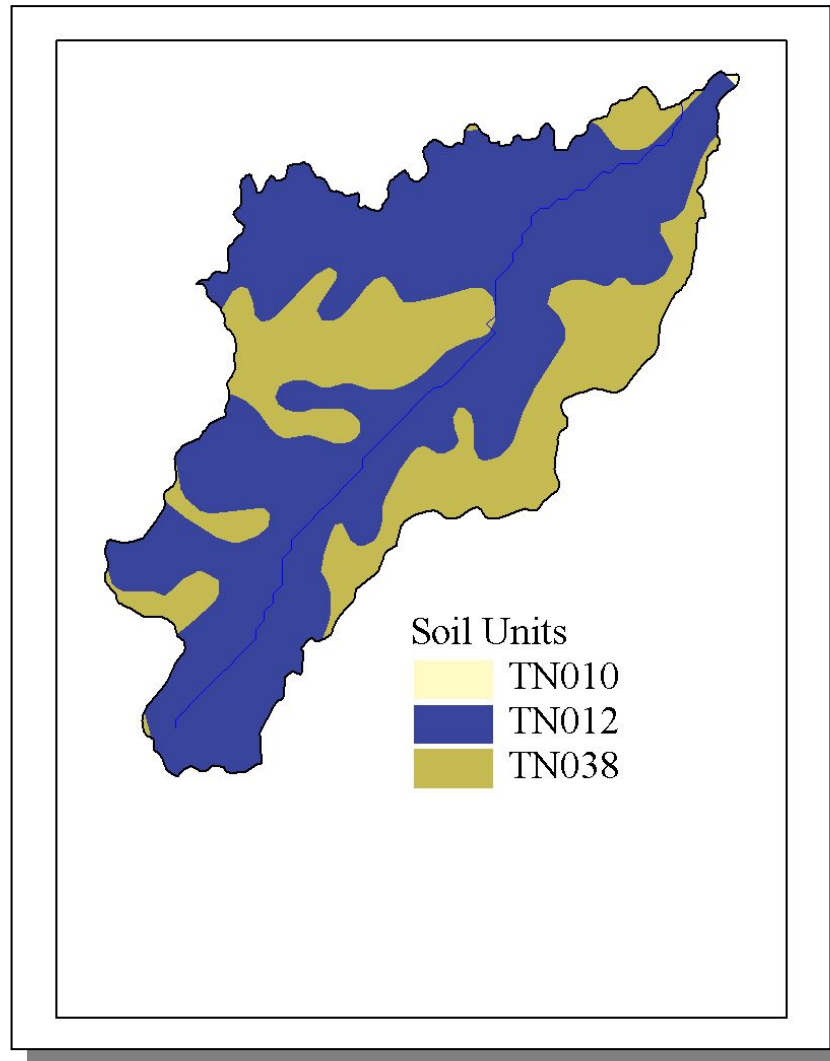


Figure 4-58. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080108.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN038	9.00	C	1.6	5.20	Silty Loam	0.46

Table 4-47. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080108. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	3.96	925	978	1,113	20.3

Table 4-48. Population Estimates in Subwatershed 080102080108.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Bolivar	Hardeman	5,969	2,098	1,915	161	22

Table 4-49. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080108.

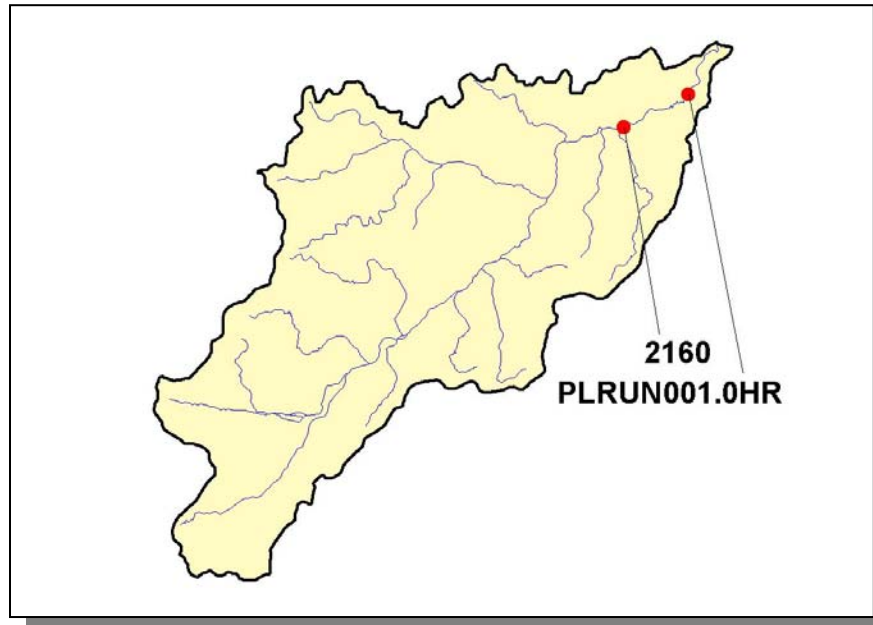


Figure 4-59. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080108. More information, including site names and locations, is provided in Appendix IV.

4.2.A.viii.a. Point Source Contributions.

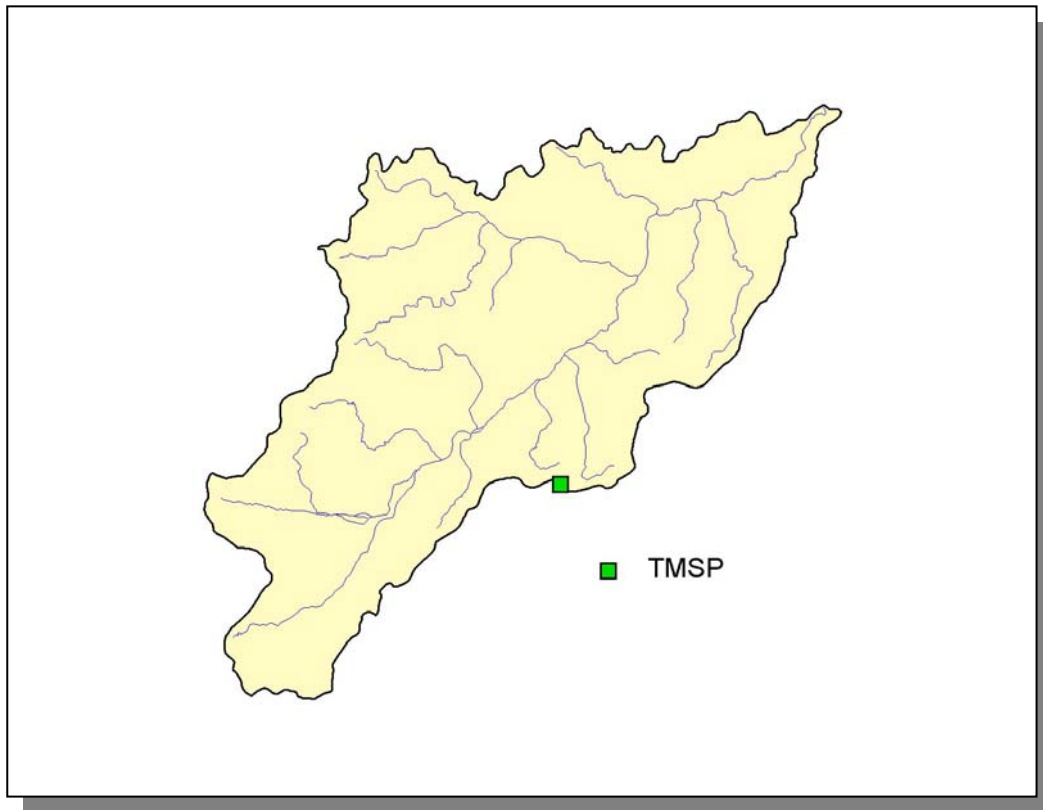


Figure 4-60. Location of Permits Issued in Subwatershed 080102080108. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-61. Location of TMSP Sites in Subwatershed 080102080108. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.viii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
429	742	<5	<5	244	7

Table 4-50. Summary of Livestock Count Estimates in Subwatershed 080102080108. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-51. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-52. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-53. Annual Estimated Total Soil Loss in Subwatershed 080102080108.

4.2.A.ix. 080102080109 (Mill Creek).

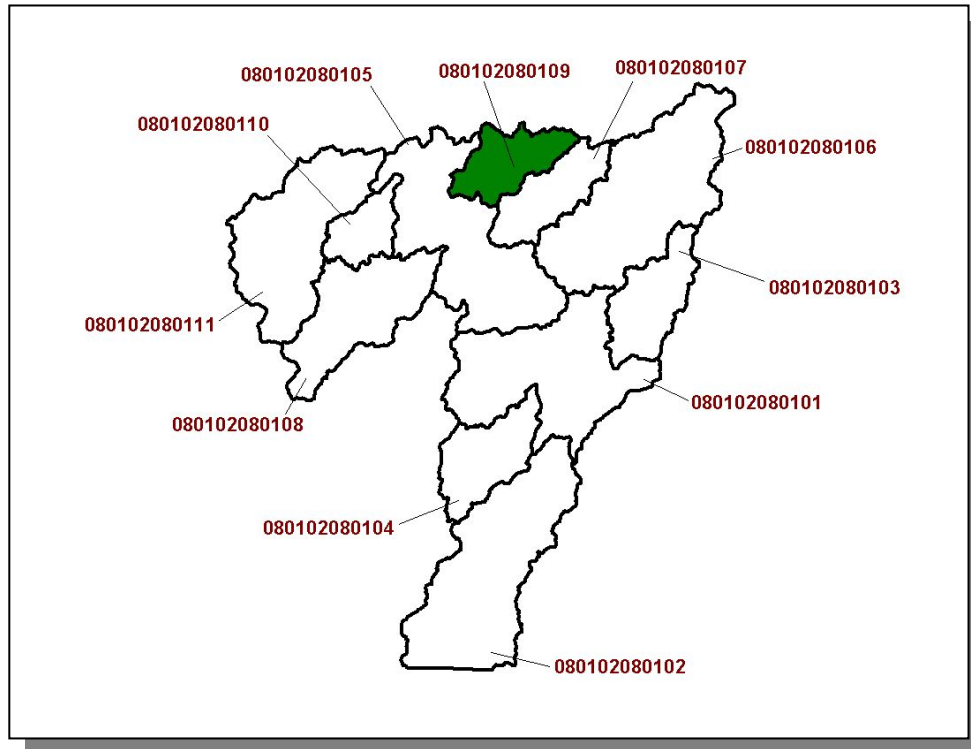


Figure 4-62. Location of Subwatershed 080102080109. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

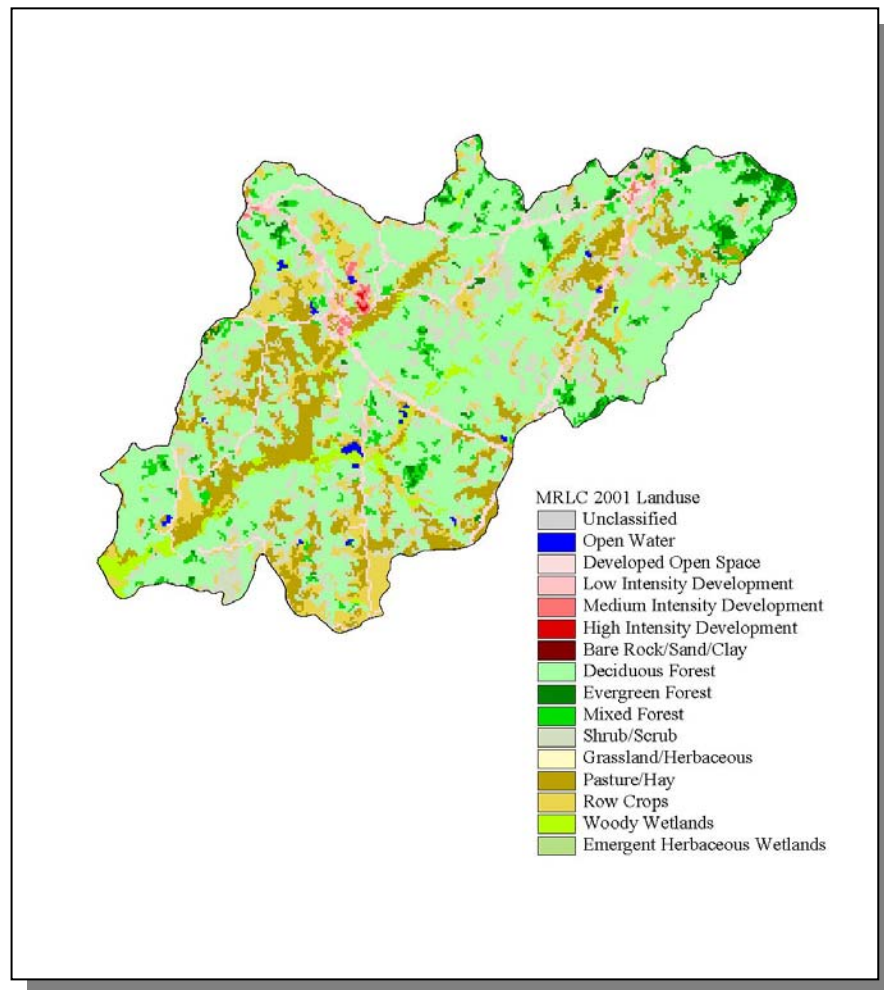


Figure 4-63. Illustration of Land Use Distribution in Subwatershed 080102080109.

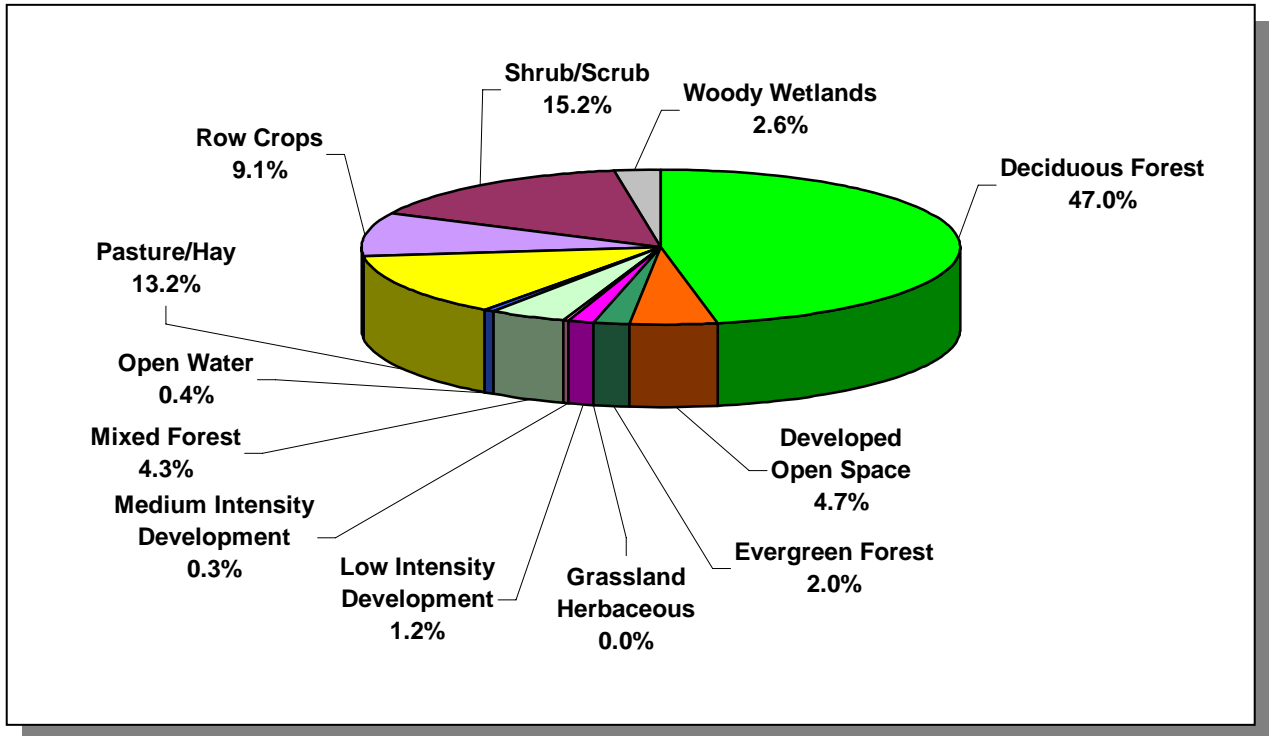


Figure 4-64. Land Use Distribution in Subwatershed 080102080109. More information is provided in Appendix IV.

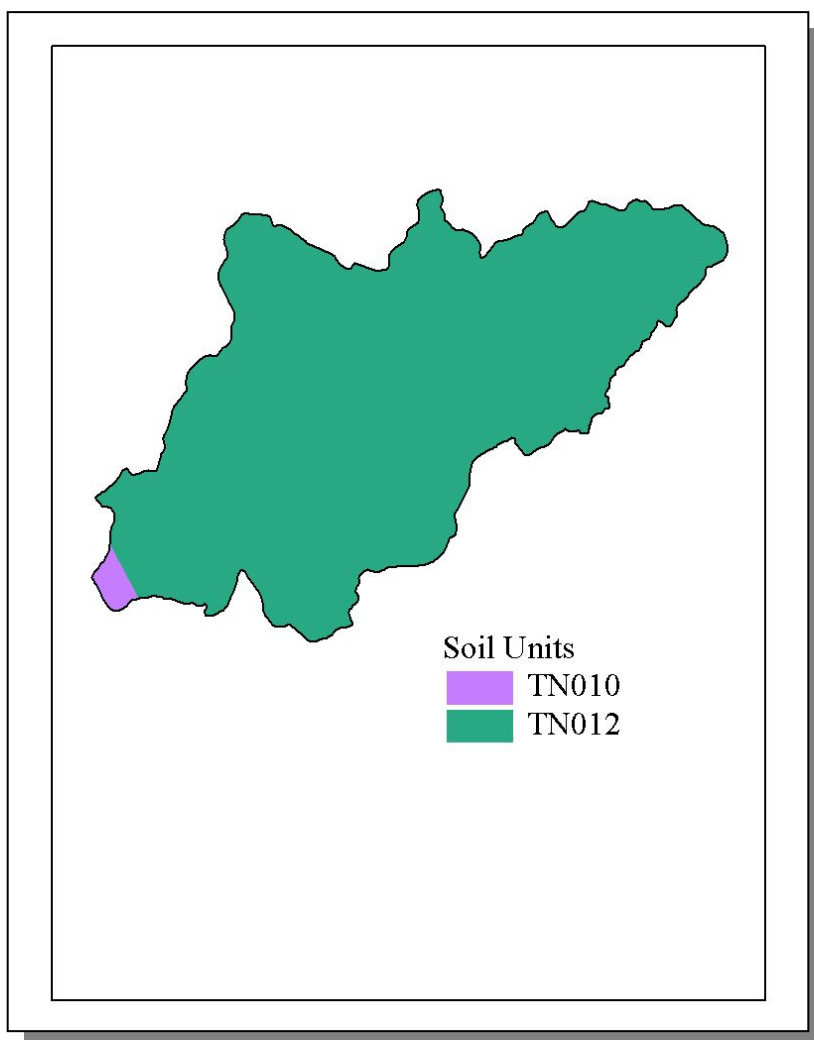


Figure 4-65. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080109.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39

Table 4-54. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080109. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	1.93	452	478	544	20.4

Table 4-55. Population Estimates in Subwatershed 080102080109.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Toone	Hardeman	279	102	69	33	0

Table 4-56. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080109.

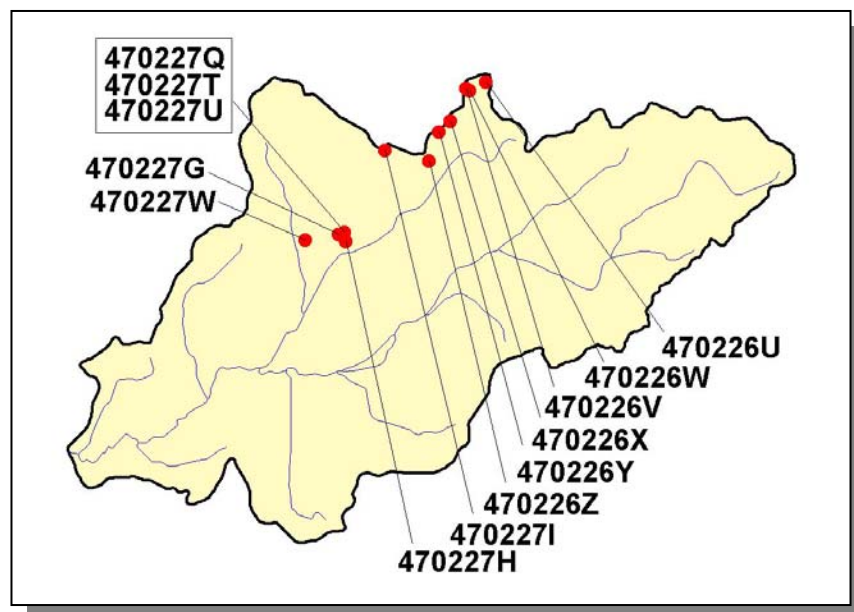


Figure 4-66. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080109. More information, including site names and locations, is provided in Appendix IV.

4.2.A.ix.a. Point Source Contributions.

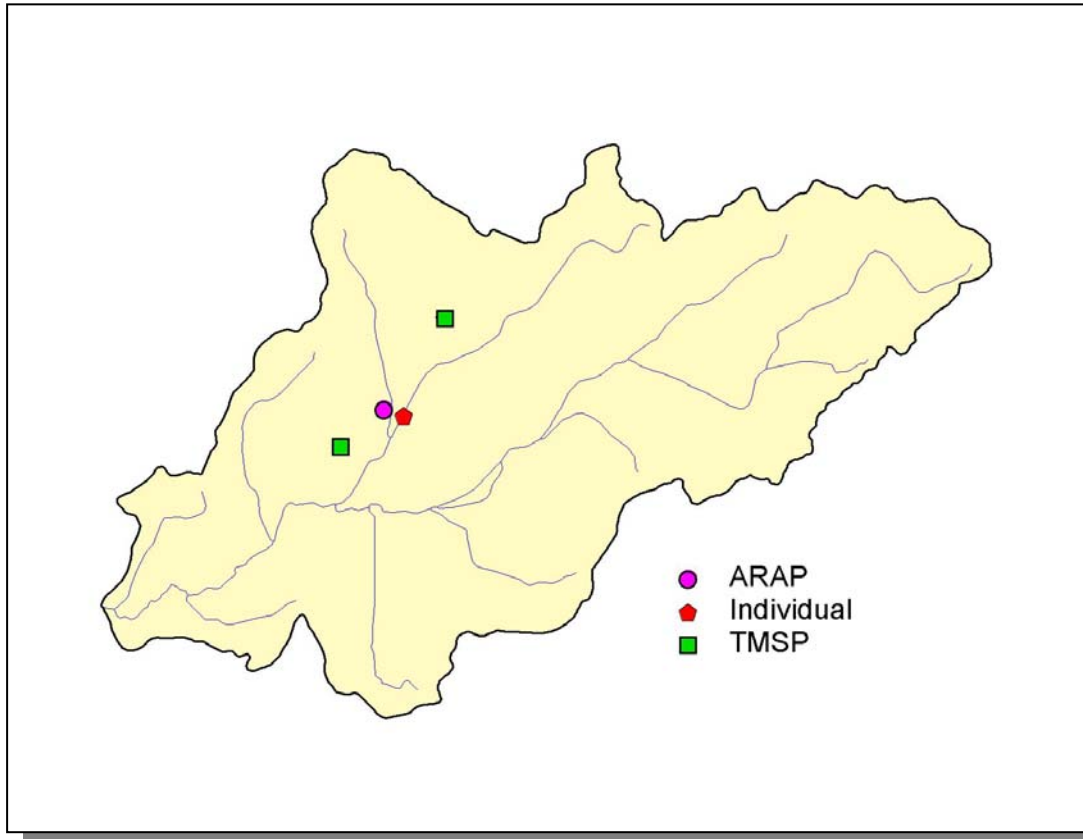


Figure 4-67. Location of Permits Issued in Subwatershed 080102080109. More information, including the names of facilities, is provided in Appendix IV.

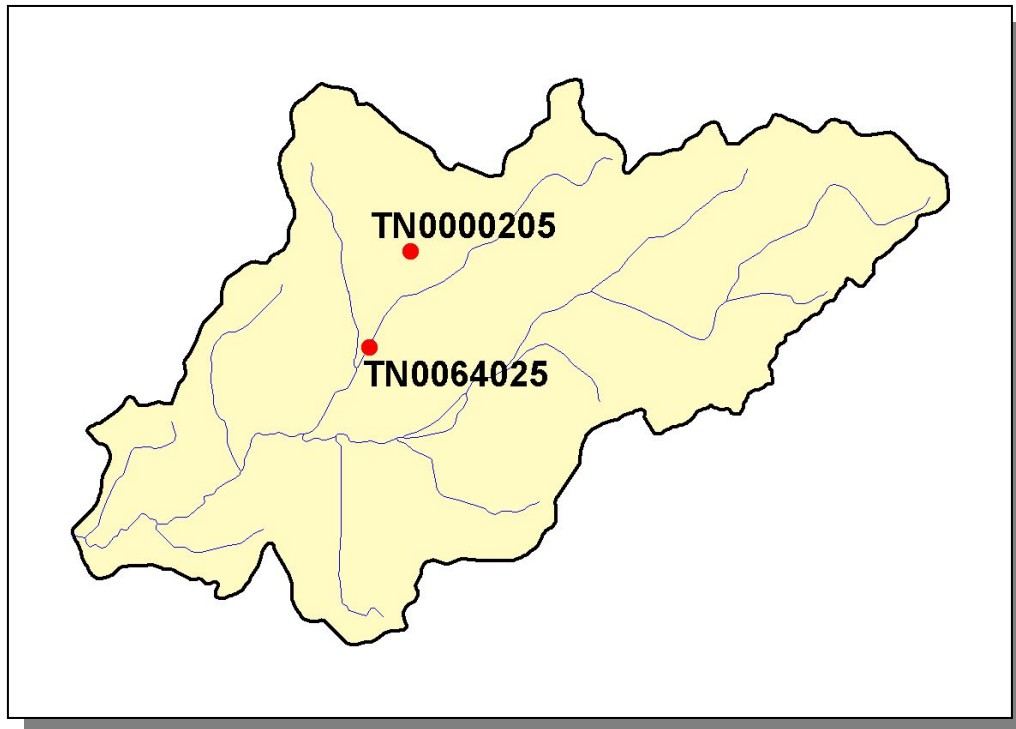


Figure 4-68. Location of Active NPDES Sites in Subwatershed 080102080109. More information, including the names of facilities, is provided in Appendix IV.

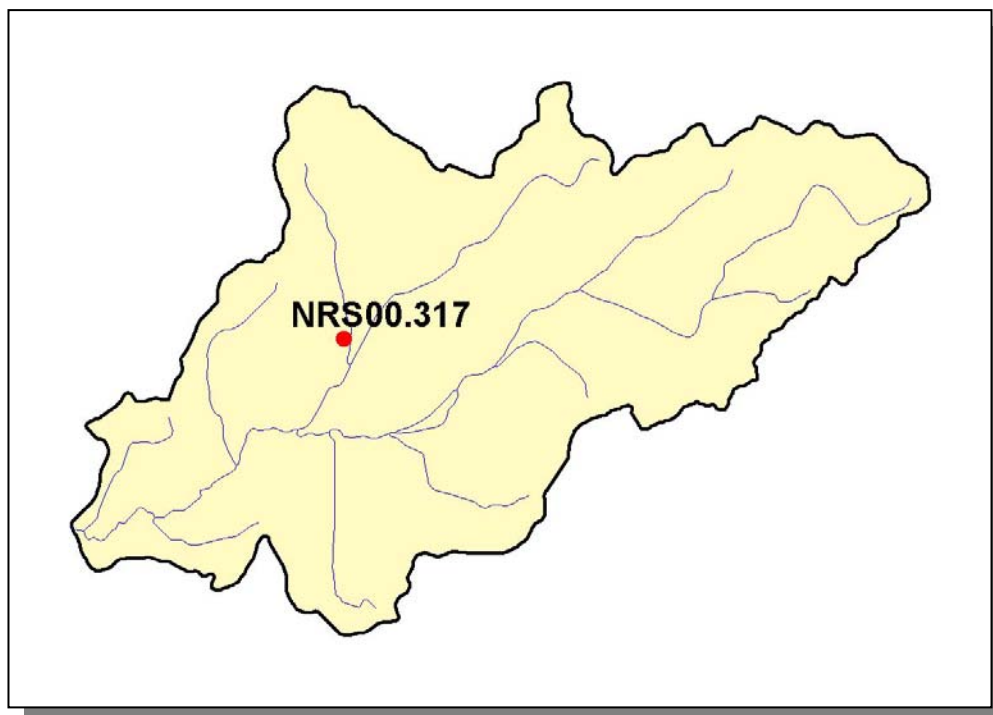


Figure 4-69. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080109. More information is provided in Appendix IV.

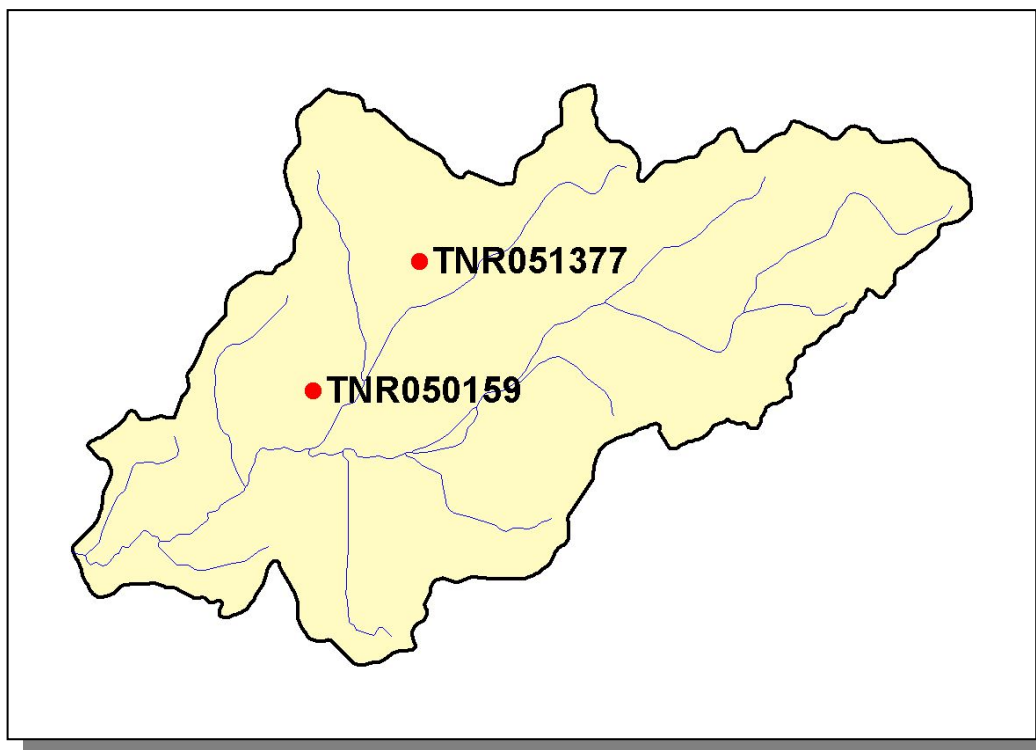


Figure 4-70. Location of TMSP Sites in Subwatershed 080102080109. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.ix.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
176	305	<5	<5	100	<5

Table 4-57. Summary of Livestock Count Estimates in Subwatershed 080102080109. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-58. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-59. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-60. Annual Estimated Total Soil Loss in Subwatershed 080102080109.

4.2.A.x. 080102080110 (Short Creek).

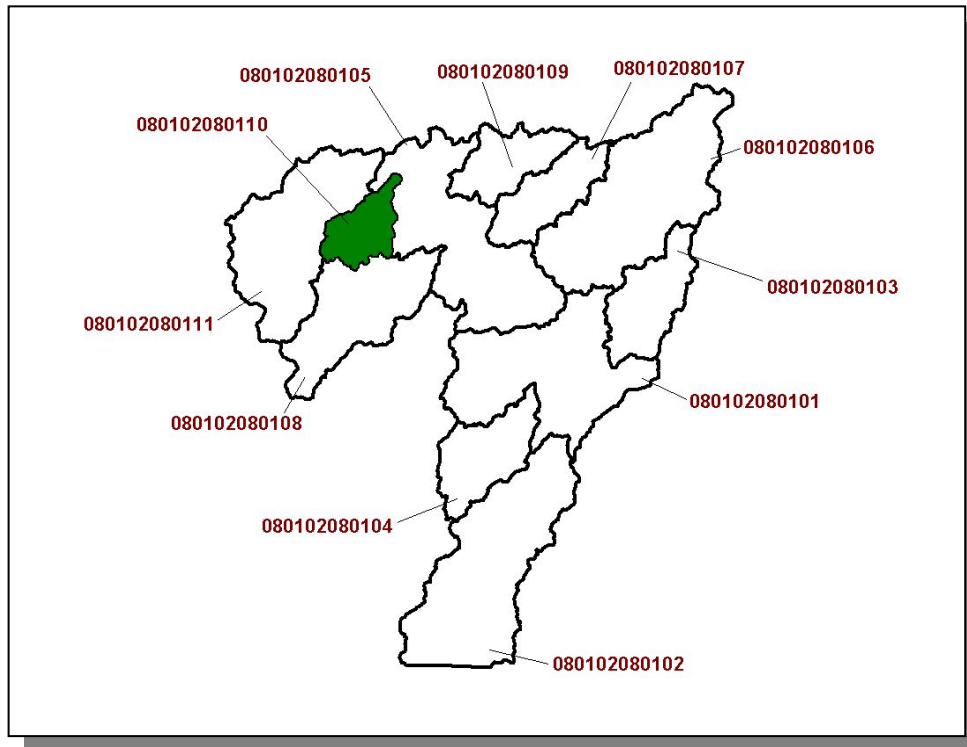


Figure 4-71. Location of Subwatershed 080102080110. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

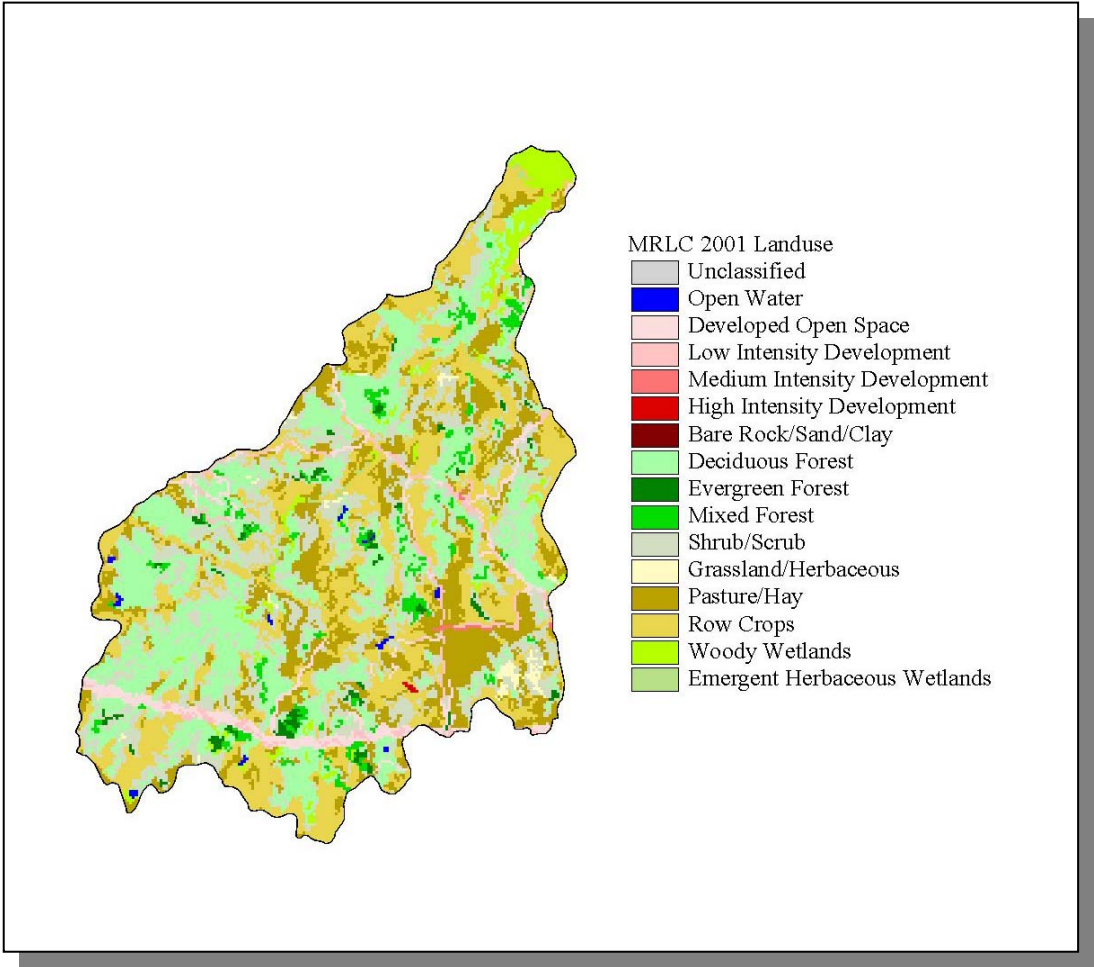


Figure 4-72. Illustration of Land Use Distribution in Subwatershed 080102080110.

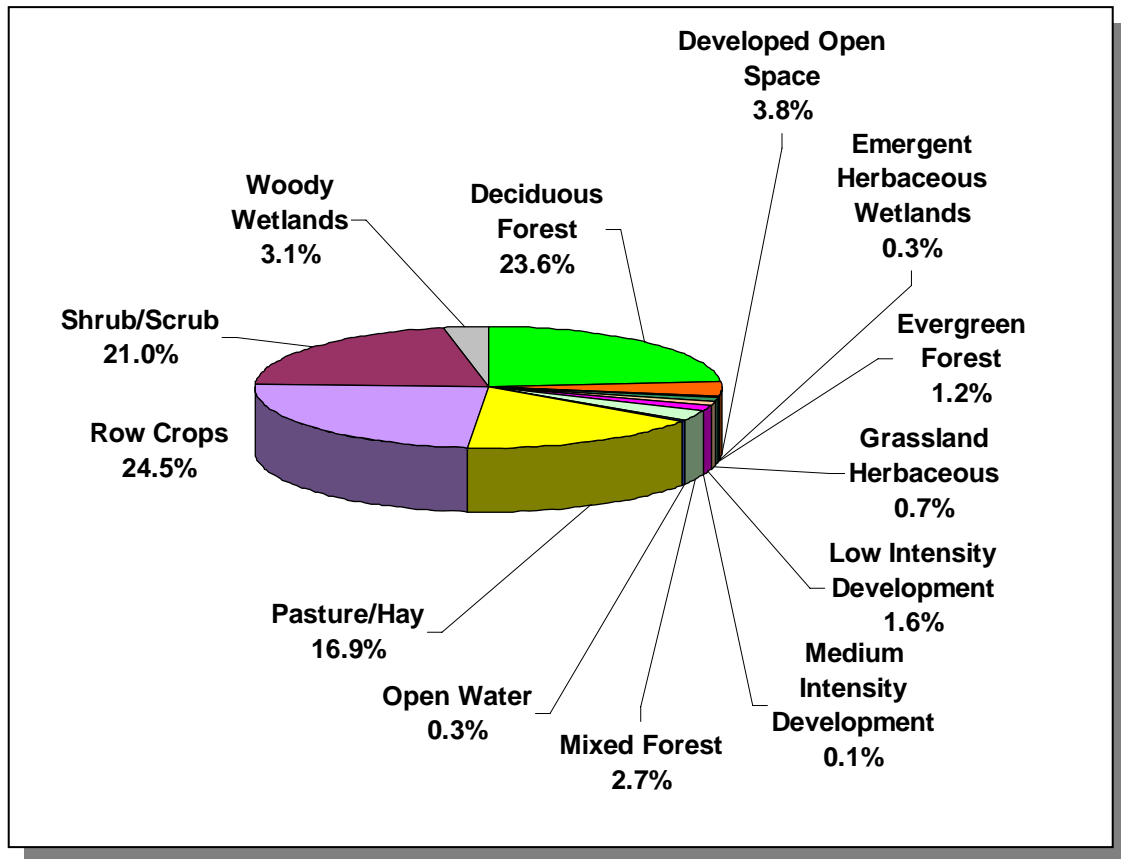


Figure 4-73. Land Use Distribution in Subwatershed 080102080110. More information is provided in Appendix IV.

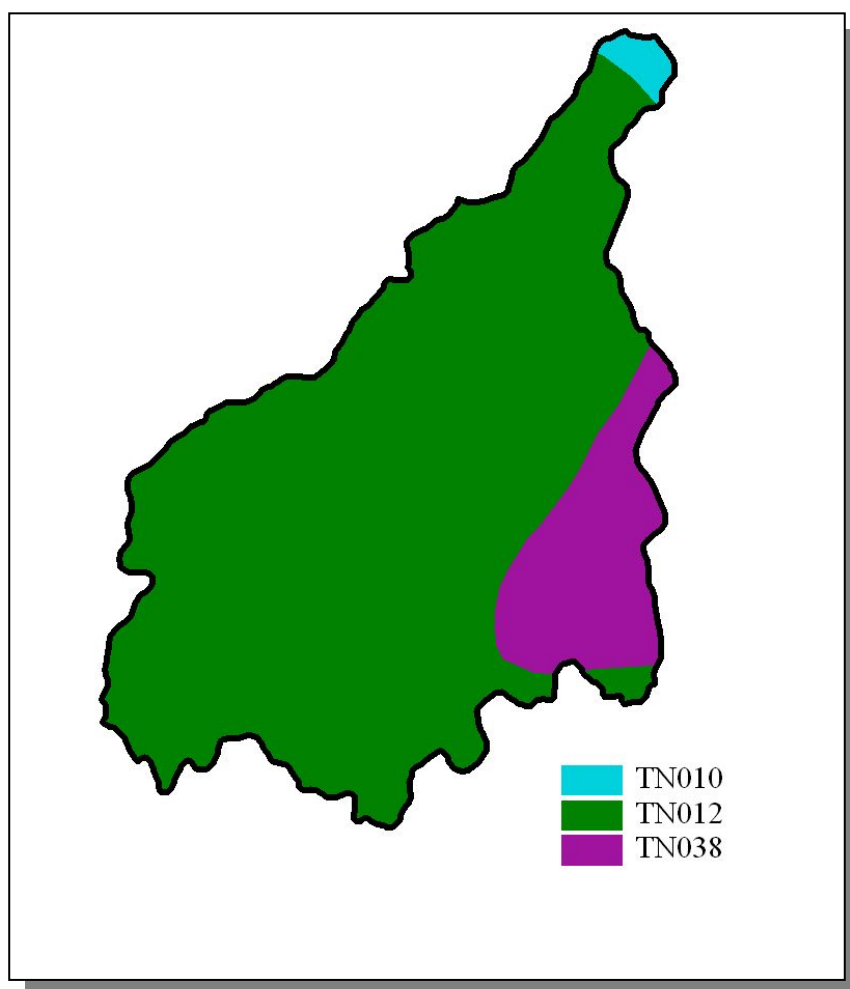


Figure 4-74. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080110.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN038	9.00	C	1.65	5.20	Silty Loam	0.46

Table 4-61. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080110. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	1.35	316	334	380	20.3

Table 4-62. Population Estimates in Subwatershed 080102080110.



Figure 4-75. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080110. More information, including site names and locations, is provided in Appendix IV.

4.2.A.x.a. Point Source Contributions.

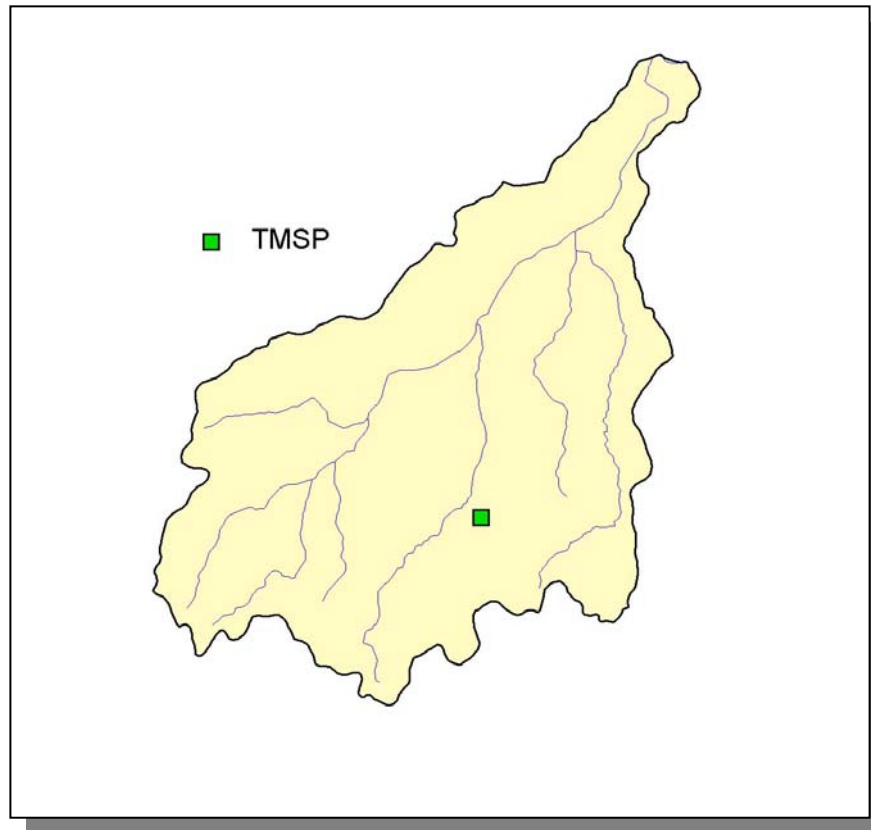


Figure 4-76. Location of Permits Issued in Subwatershed 0801020810. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-77. Location of TMSP Sites in Subwatershed 080102080110. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.x.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Milk Cow	Hogs	Sheep
160	276	<5	91	<5

Table 4-63. Summary of Livestock Count Estimates in Subwatershed 080102080110. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-64. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-65. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-66. Annual Estimated Total Soil Loss in Subwatershed 080102080110.

4.2.A.xi. 080102080111 (Clear Creek).

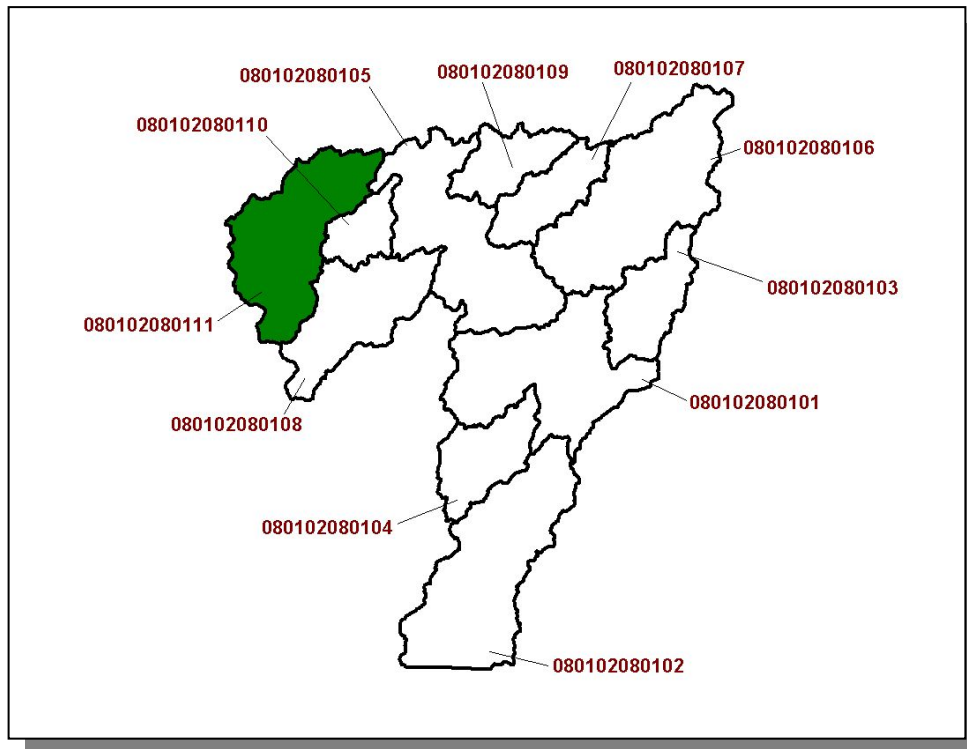


Figure 4-78. Location of Subwatershed 080102080111. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

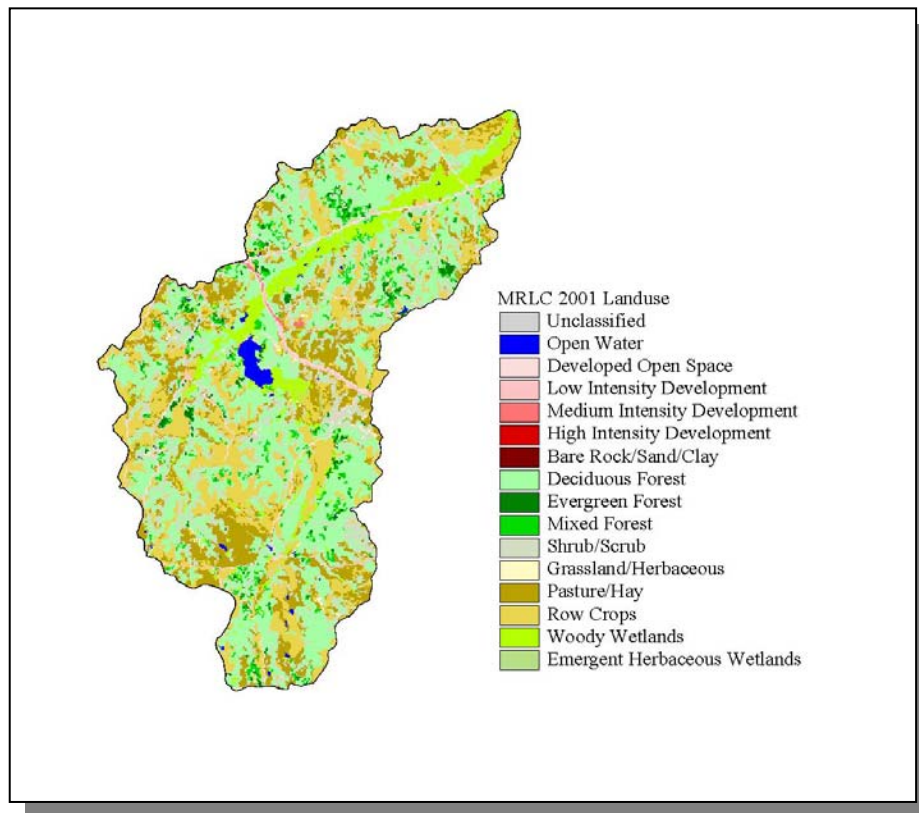


Figure 4-79. Illustration of Land Use Distribution in Subwatershed 080102080111.

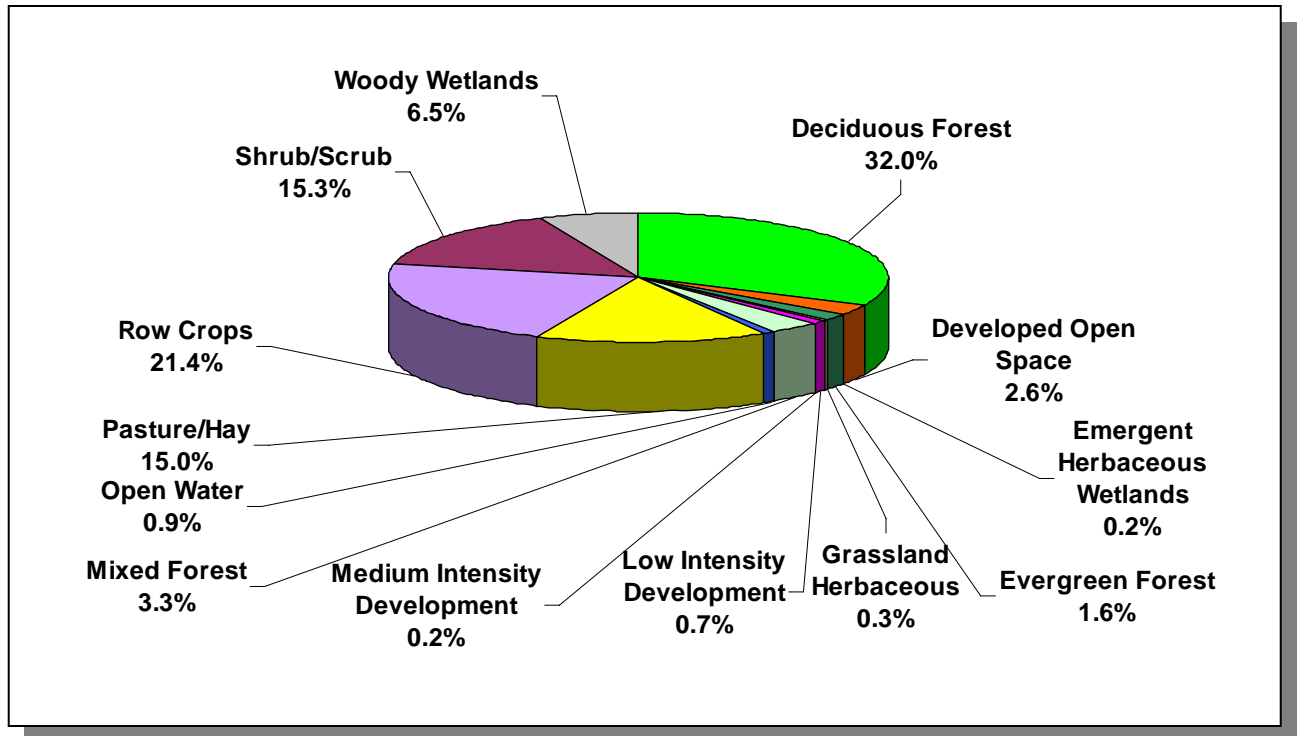


Figure 4-80. Land Use Distribution in Subwatershed 080102080111. More information is provided in Appendix IV.

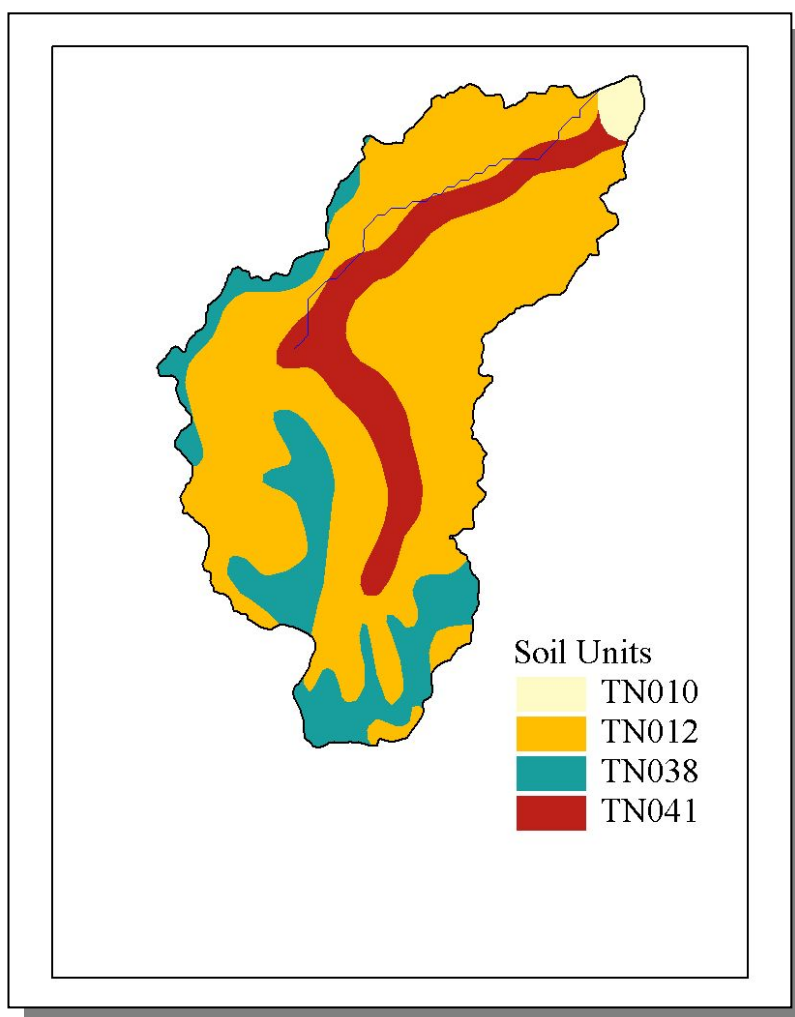


Figure 4-81. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080111.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN038	9.00	C	1.65	5.20	Silty Loam	0.46
TN041	59.00	C	1.35	4.98	Silty Loam	0.34

Table 4-67. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080111. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	5.27	1,231	1,301	1,480	20.2

Table 4-68. Population Estimates in Subwatershed 080102080111.



Figure 4-82. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080111. More information, including site names and locations, is provided in Appendix IV.

4.2.A.xi.a. Point Source Contributions.

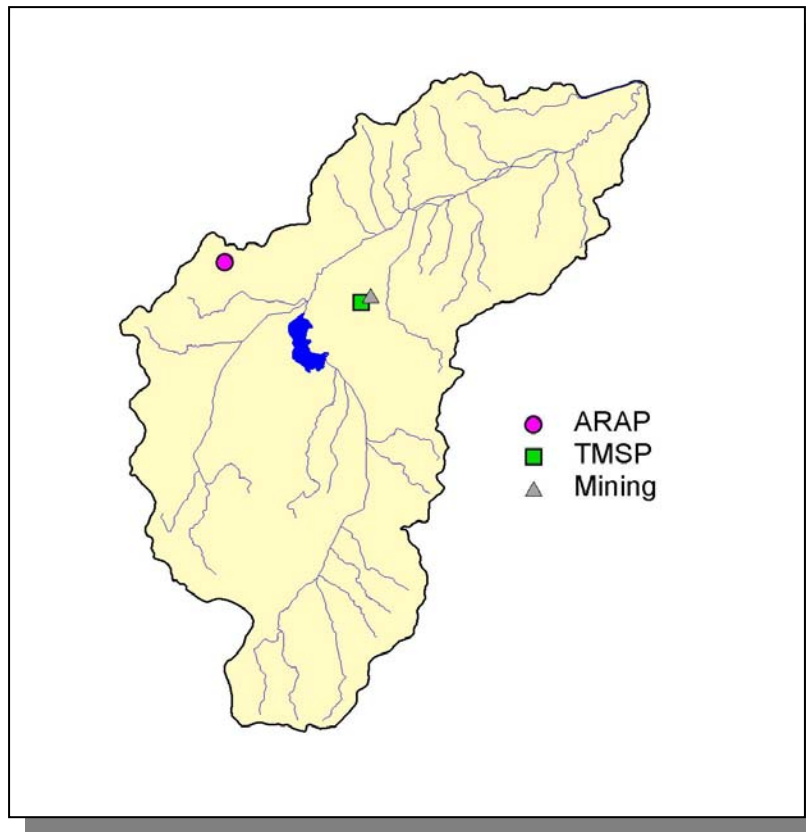


Figure 4-83. Location of Permits Issued in Subwatershed 080102080111. More information, including the names of facilities, is provided in Appendix IV.

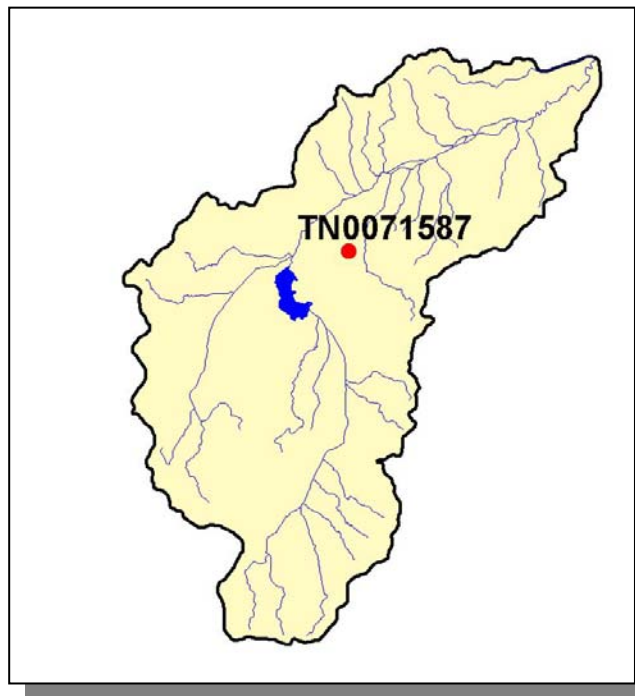


Figure 4-84. Location of Active Mining Sites in Subwatershed 080102080111. More information, including the names of mining operations, is provided in Appendix IV.

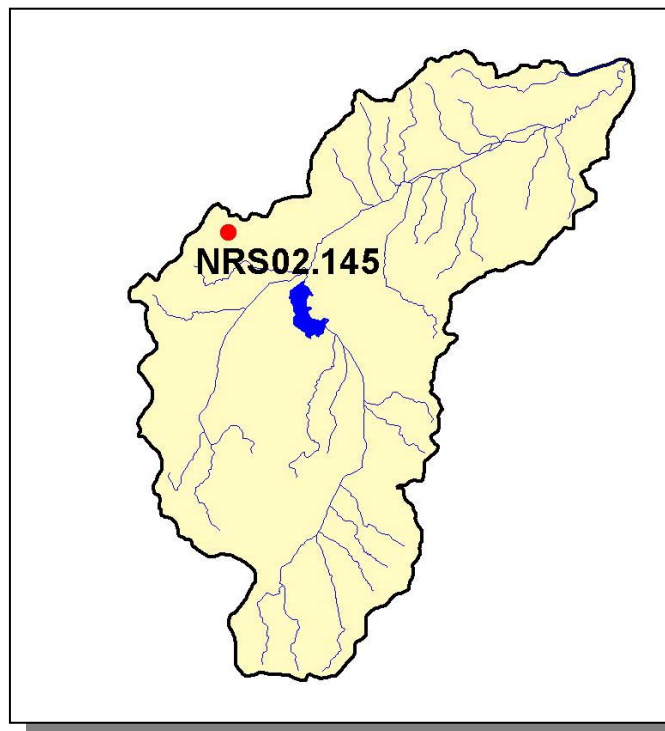


Figure 4-85. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080111. More information is provided in Appendix IV.

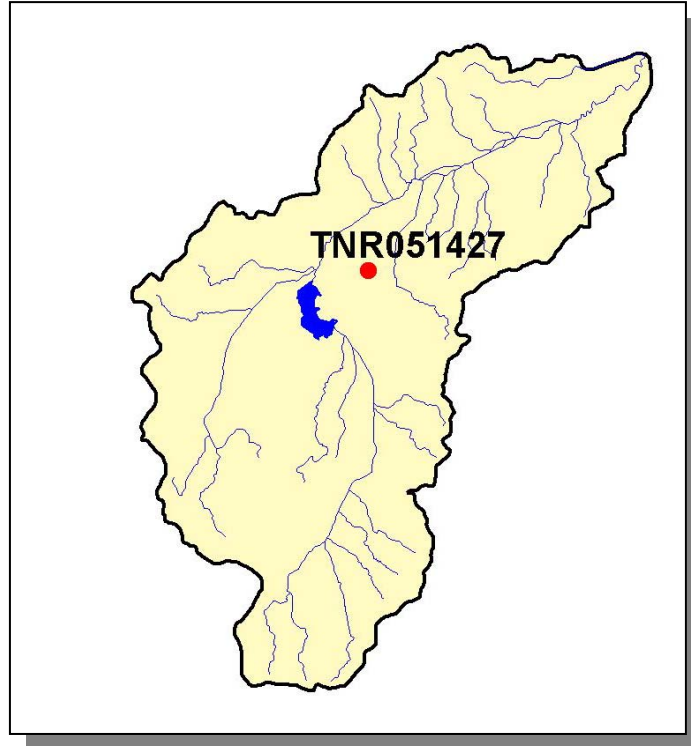


Figure 4-86. Location of TMSP Sites in Subwatershed 080102080111. More information, including the names of facilities, is provided in Appendix IV.

4.2.A.xi.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
604	1,044	<5	<5	343	9

Table 4-69. Summary of Livestock Count Estimates in Subwatershed 080102080111. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-70. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-71. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Other Cropland not Planted	4.23
Summer Fallow (Other Cropland)	6.11
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-72. Annual Estimated Total Soil Loss in Subwatershed 080102080111.

4.2.B. 0801020802.

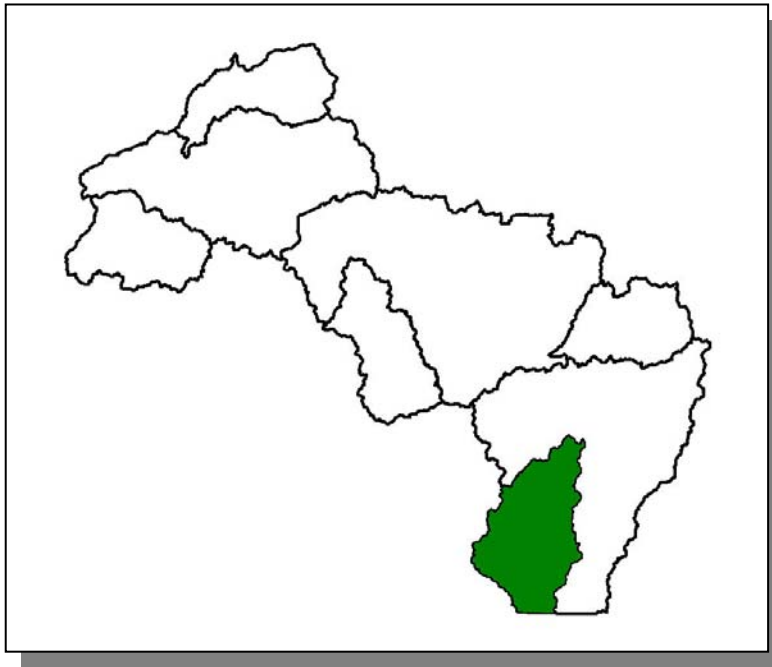


Figure 4-87. Location of Subwatershed 0801020802. All Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.B.i. 080102080201 (Upper Spring Creek).

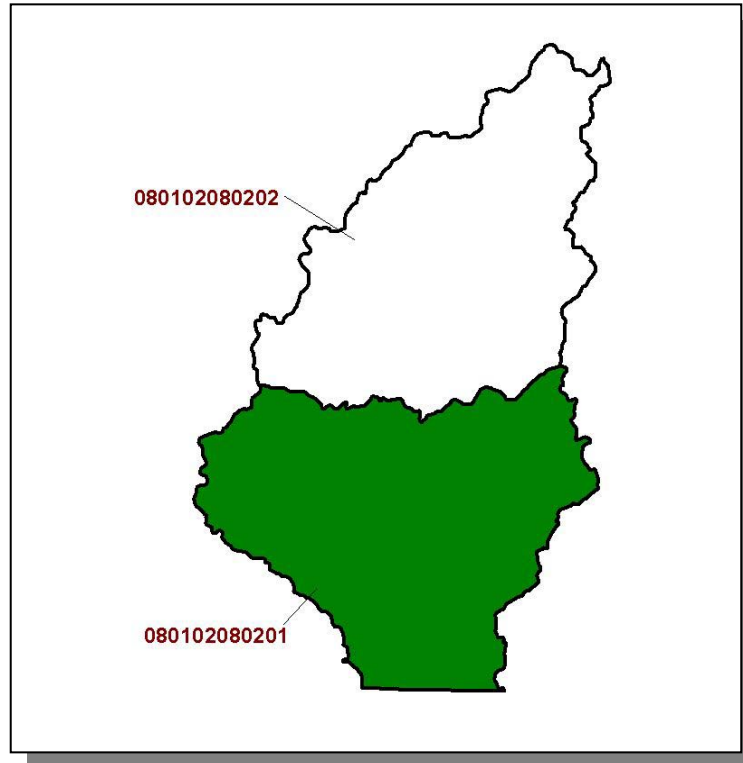


Figure 4-88. Location of Subwatershed 080102080201. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

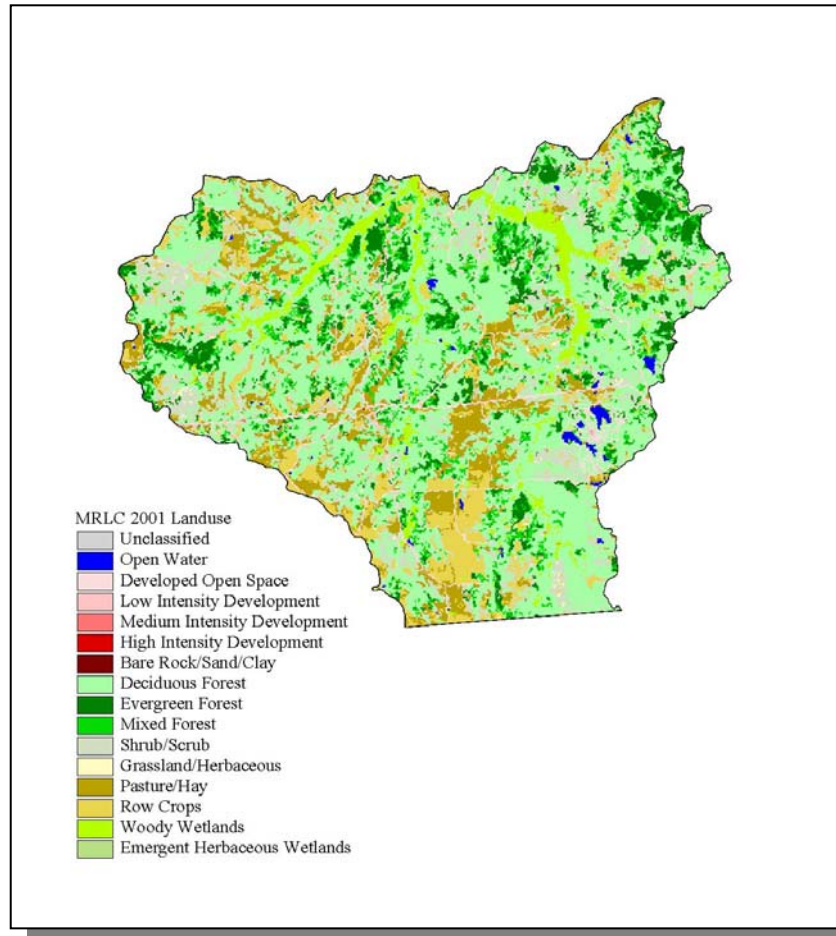


Figure 4-89. Illustration of Land Use Distribution in Subwatershed 080102080201.

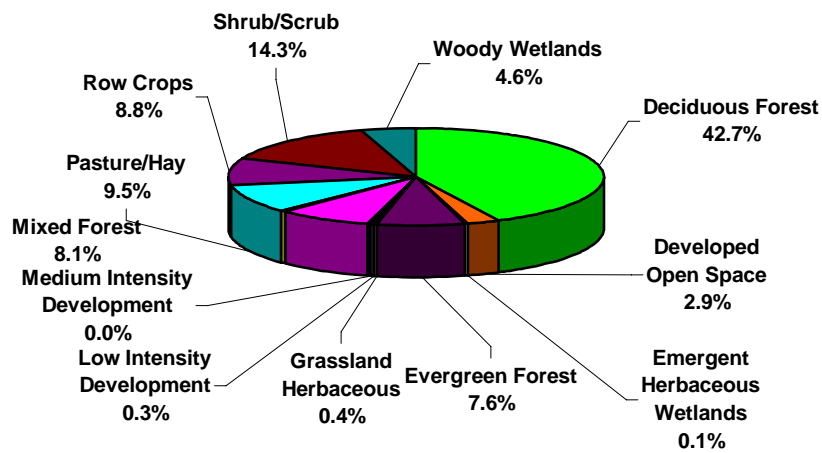


Figure 4-90. Land Use Distribution in Subwatershed 080102080201. More information is provided in Appendix IV.

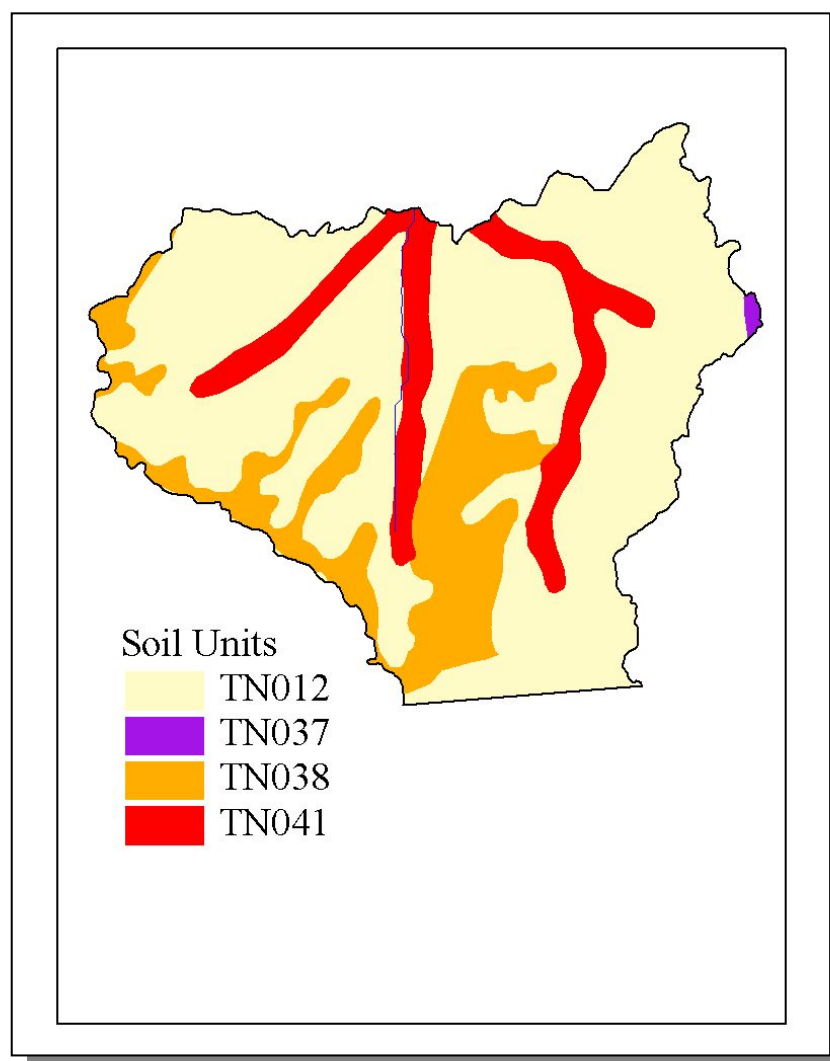


Figure 4-91. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080201.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN038	9.00	C	1.65	5.20	Silty Loam	0.46

Table 4-73. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080201. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
County								
Hardeman	23,377	24,702	28,105	9.11	2,130	2,250	2,560	20.2

Table 4-74. Population Estimates in Subwatershed 080102080201.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Saulsbury	Hardeman	133	75	6	62	7

Table 4-75. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080201.

4.2.B.i.a. Point Source Contributions.

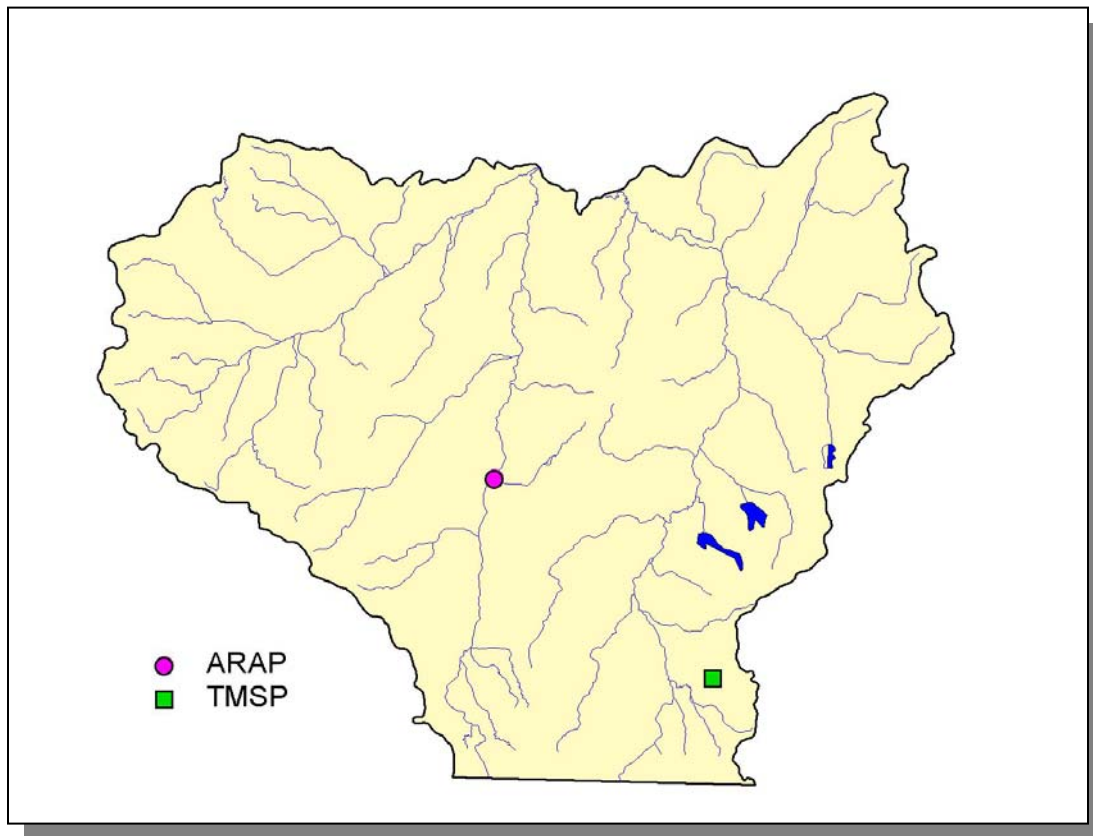


Figure 4-92. Location of Permits Issued in Subwatershed 080102080201. More information, including the names of facilities, is provided in Appendix IV.

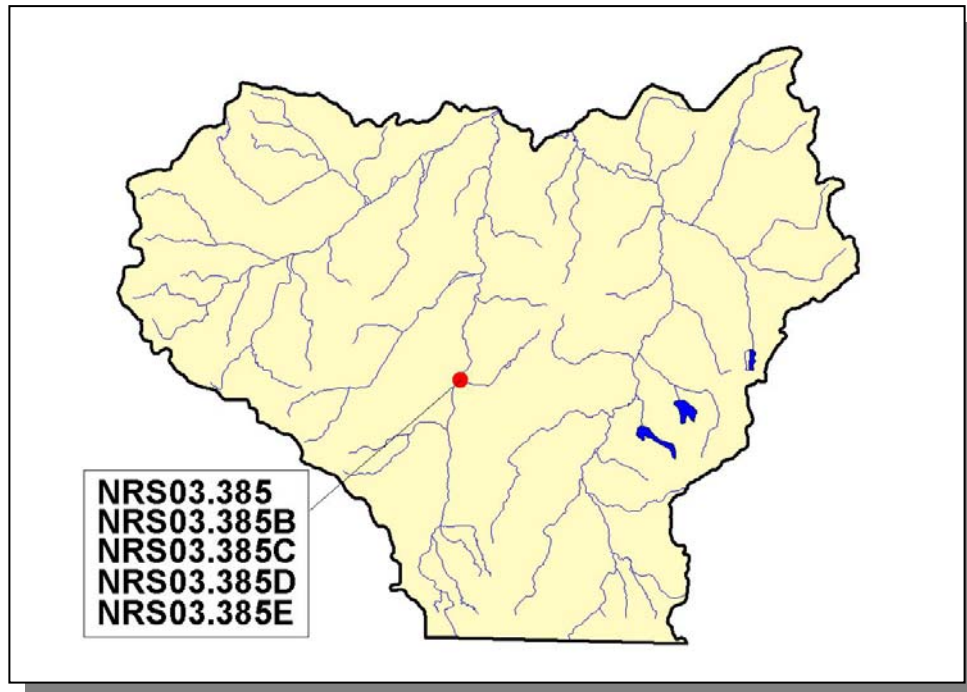


Figure 4-93. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080201. More information is provided in Appendix IV.

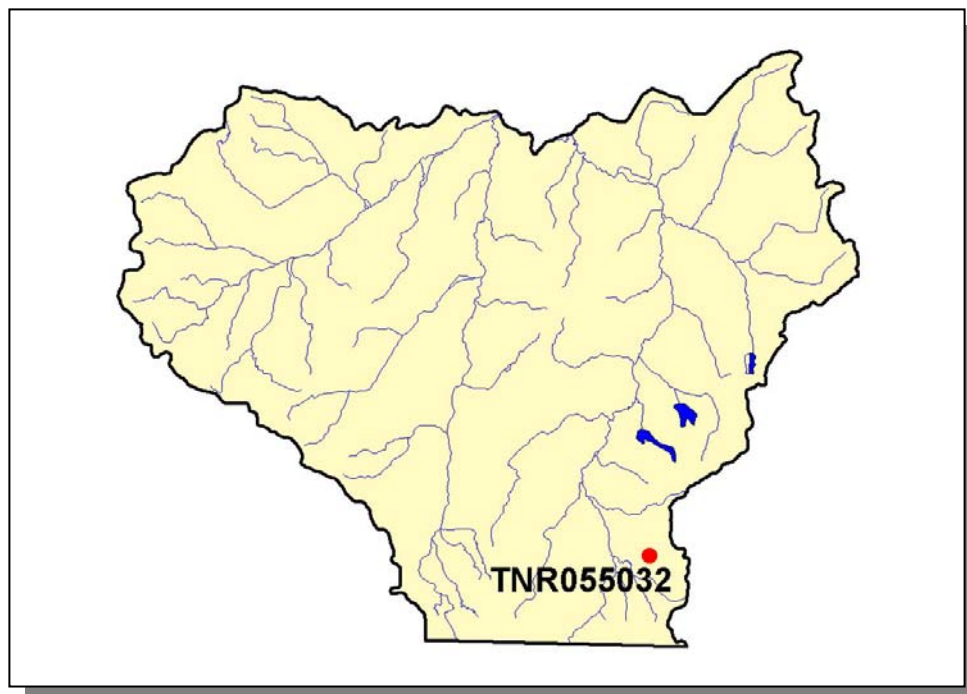


Figure 4-94. Location of TMSP Sites in Subwatershed 080102080201. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
574	987	<5	<5	309	9

Table 4-76. Summary of Livestock Count Estimates in Subwatershed 080102080201.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Benton	4,586	7,281	12	<5	47	0
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-77. Summary of Livestock Count Estimates in Benton and Hardeman Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Benton	177.0	177.0	19.4	97.9
Hardeman	247.1	247.1	5.0	18.6

Table 4-78. Forest Acreage and Annual Removal Rates (1987-1994) in Benton and Hardeman Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.24
Cotton (Row Crops)	25.48
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.99
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.39
Farmsteads and Ranch Headquarters	0.96

Table 4-79. Annual Estimated Total Soil Loss in Subwatershed 080102080201.

4.2.B.ii. 080102080202 (Lower Spring Creek).

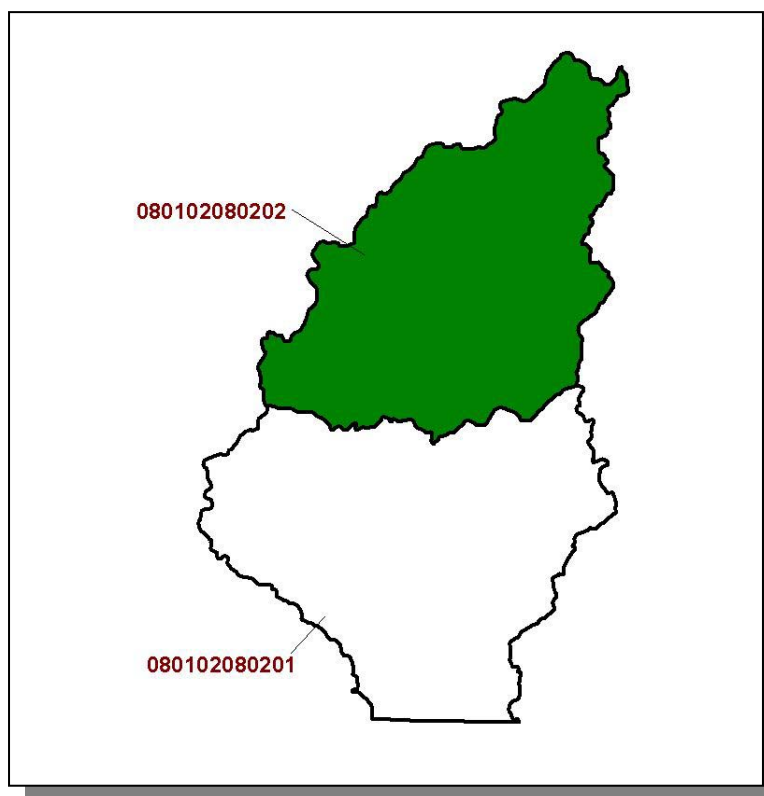


Figure 4-95. Location of Subwatershed 080102080202. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

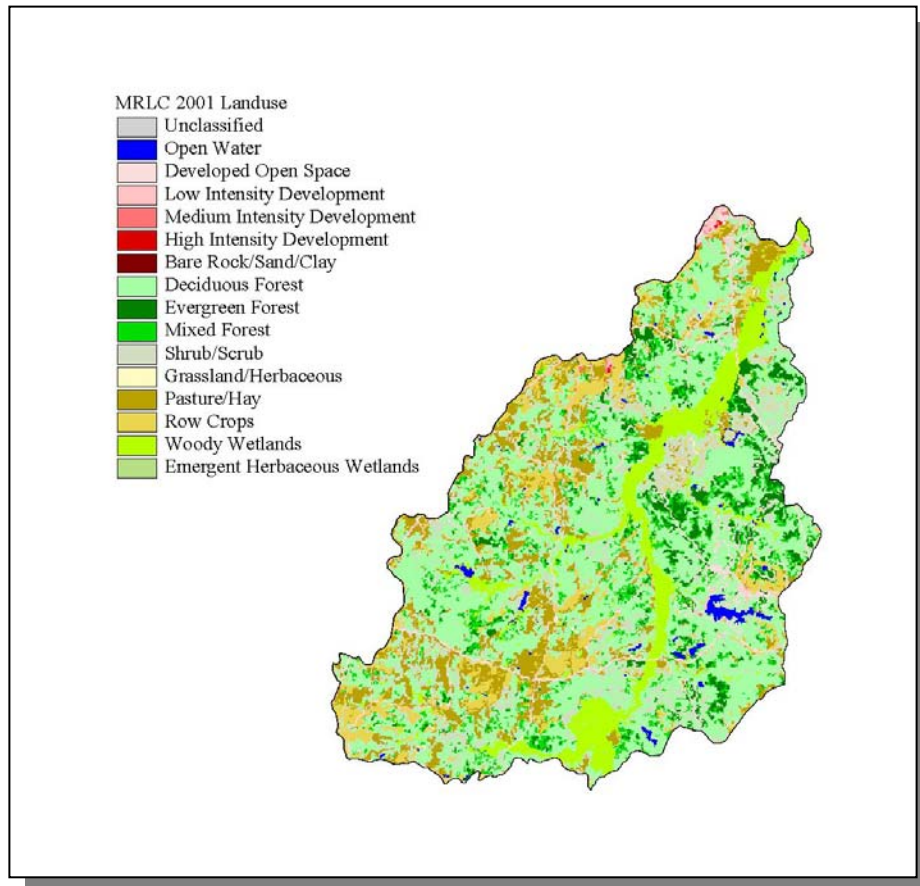


Figure 4-96. Illustration of Land Use Distribution in Subwatershed 080102080202.

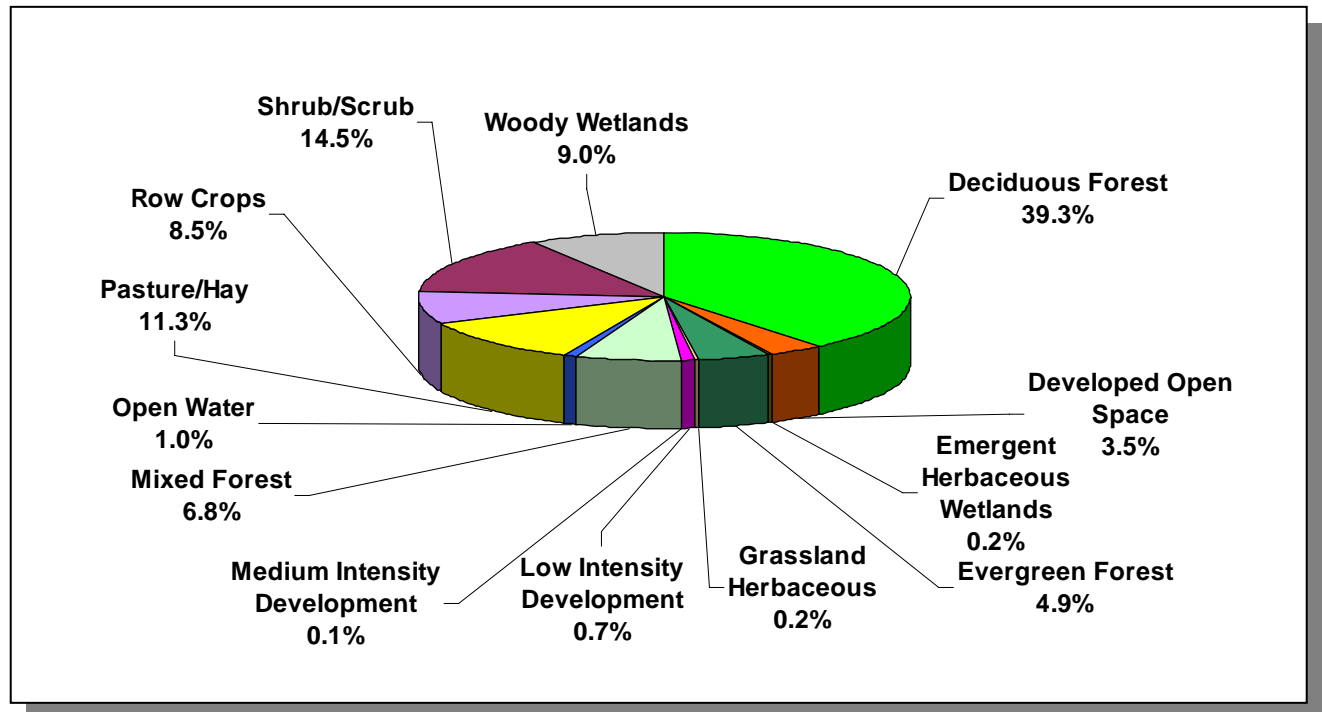


Figure 4-97. Land Use Distribution in Subwatershed 080102080202. More information is provided in Appendix IV.

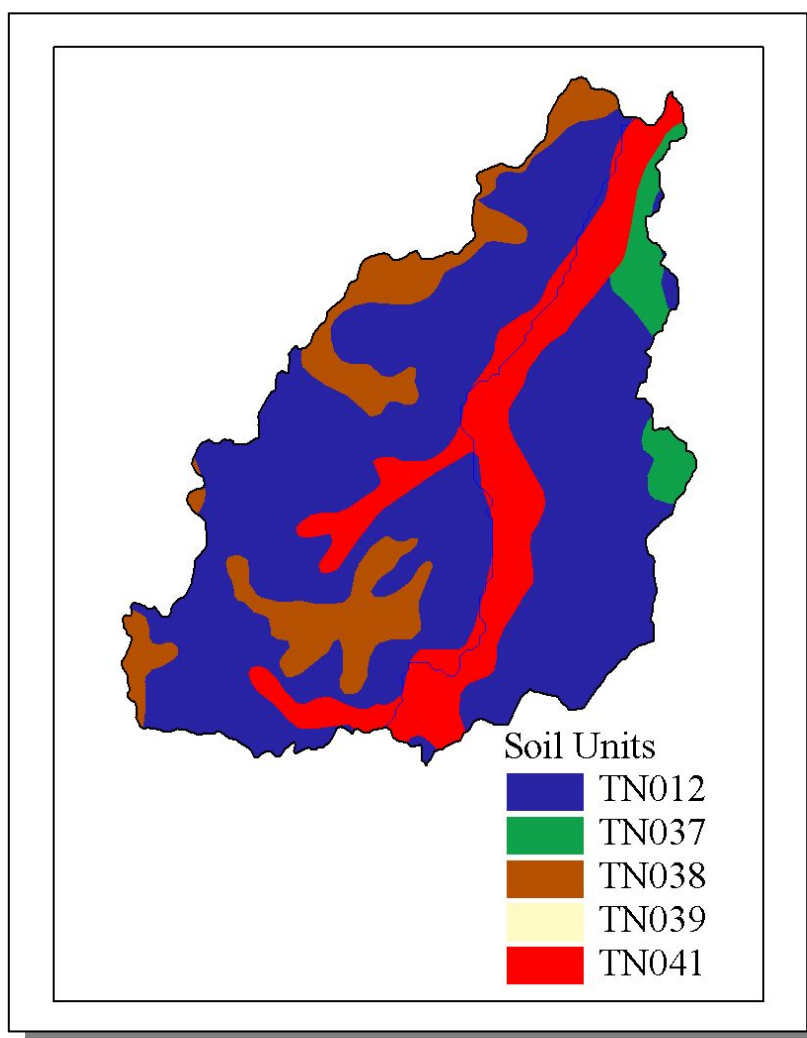


Figure 4-98. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080202.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN038	9.00	C	1.65	5.20	Silty Loam	0.46
TN039	24.00	C	1.35	5.20	Silty Loam	0.47
TN041	59.00	C	1.35	4.98	Silty Loam	0.34

Table 4-80. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080202. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	8.58	2,005	2,118	2,410	20.2

Table 4-81. Population Estimates in Subwatershed 080102080202.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Bolivar	Nardeman	5,969	2,098	1,915	161	22

Table 4-82. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080202.



Figure 4-99. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080202. More information, including site names and locations, is provided in Appendix IV.

4.2.B.ii.a. Point Source Contributions.

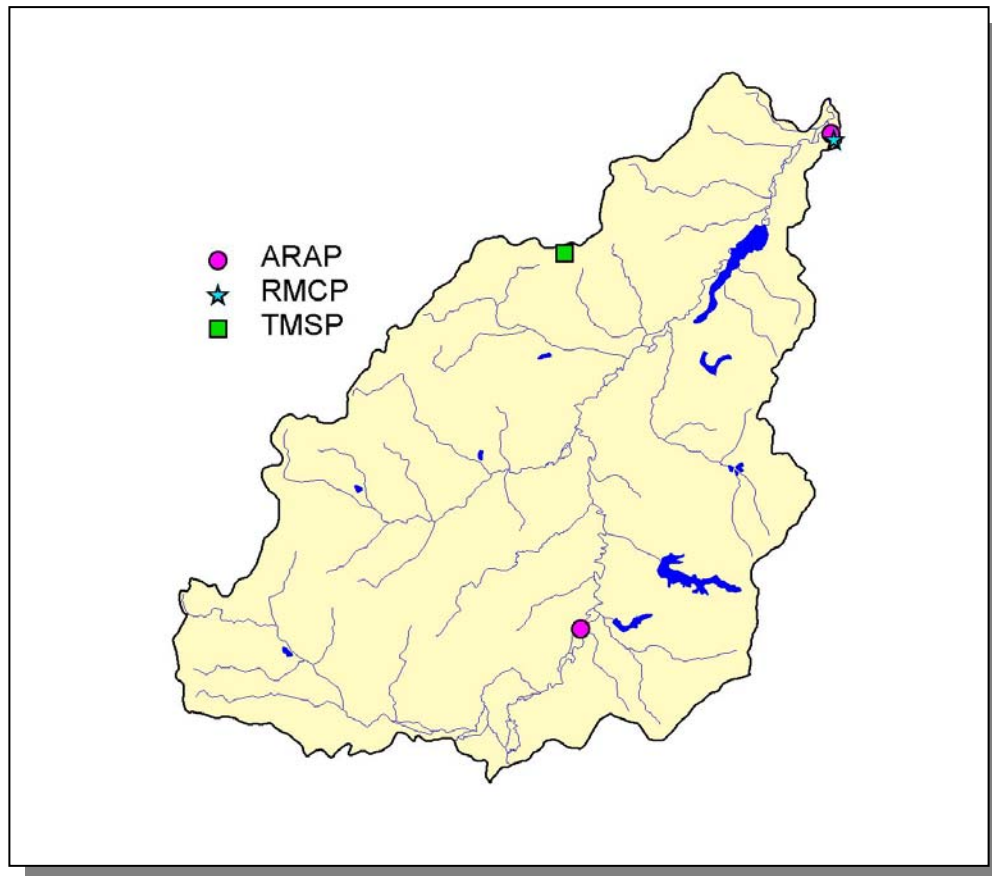


Figure 4-100. Location of Permits Issued in Subwatershed 080102080202. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-101. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 080102080202. More information is provided in Appendix IV.

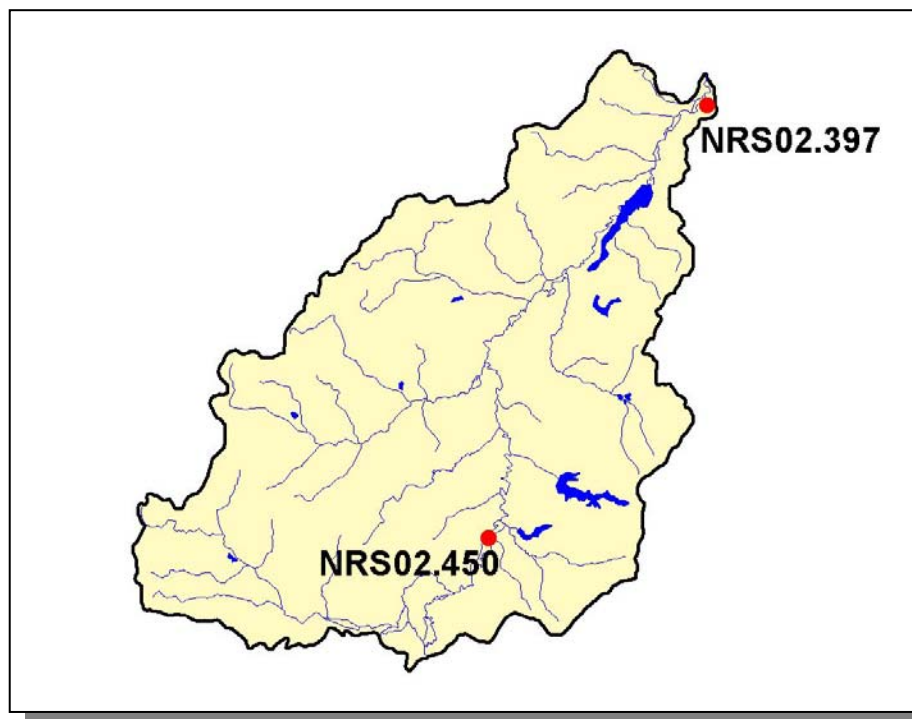


Figure 4-102. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080202. More information is provided in Appendix IV.

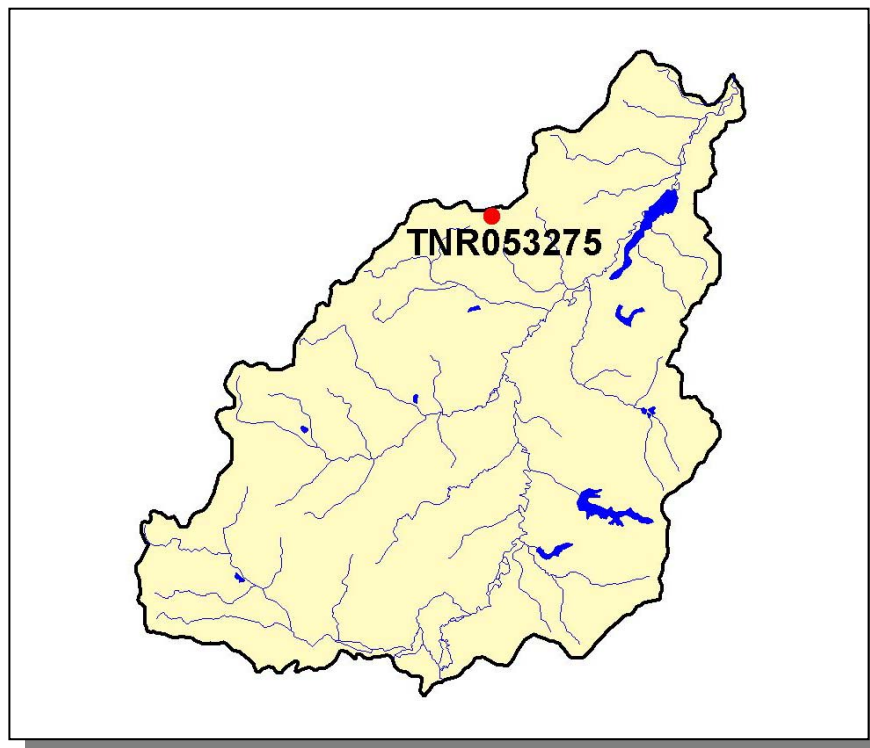


Figure 4-103. Location of TMSP Sites in Subwatershed 080102080202. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
507	877	<5	<5	288	8

Table 4-83. Summary of Livestock Count Estimates in Subwatershed 080102080202. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-84. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-85. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.23
Grass (Hayland)	0.39
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	11.41
Cotton (Row Crops)	25.79
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	12.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	4.23
Conservation Reserve Program Lands	0.27
Farmsteads and Ranch Headquarters	0.97

Table 4-86. Annual Estimated Total Soil Loss in Subwatershed 080102080202.

4.2.C. 0801020803.

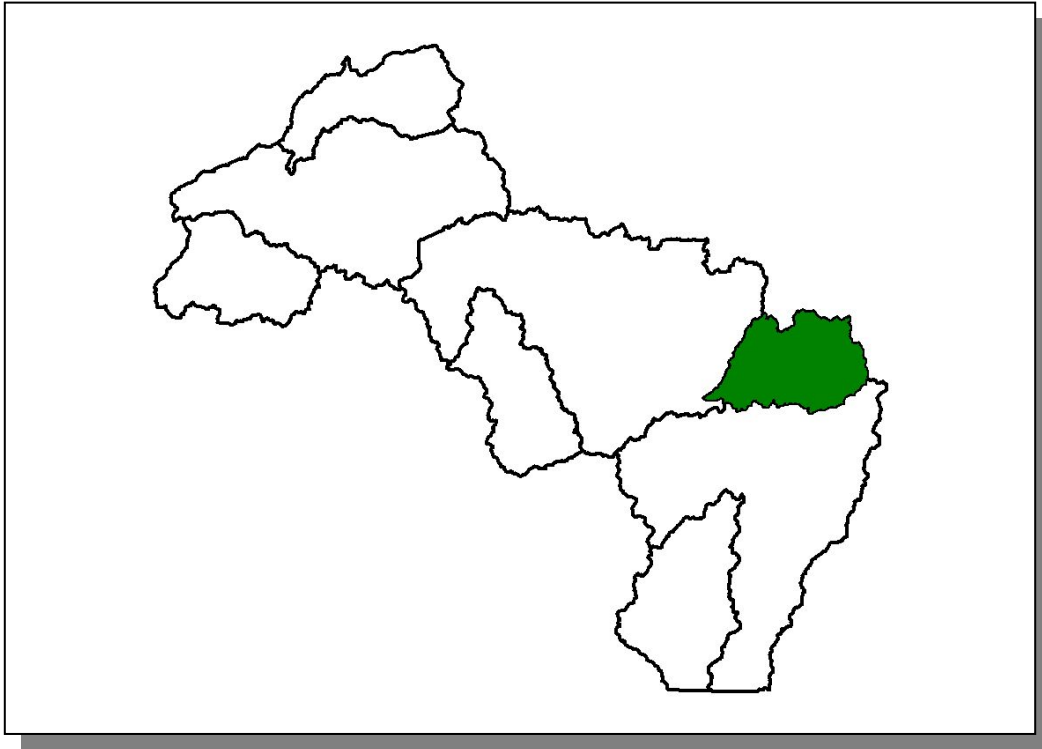


Figure 4-104. Location of Subwatershed 0801020803. All Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.C.i. 080102080301 (Lacy Creek).

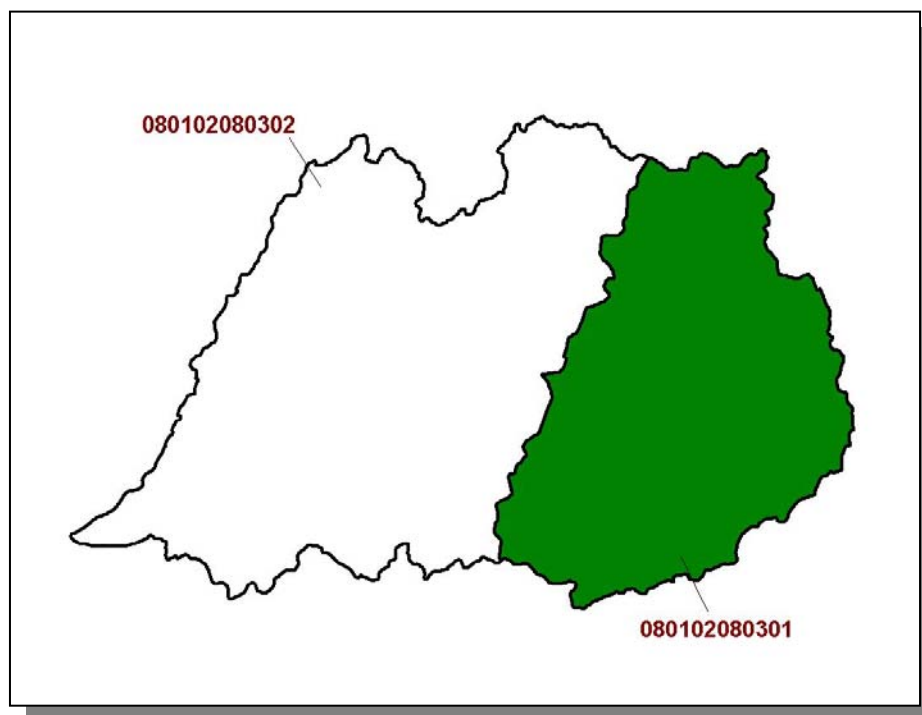


Figure 4-105. Location of Subwatershed 080102080301. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

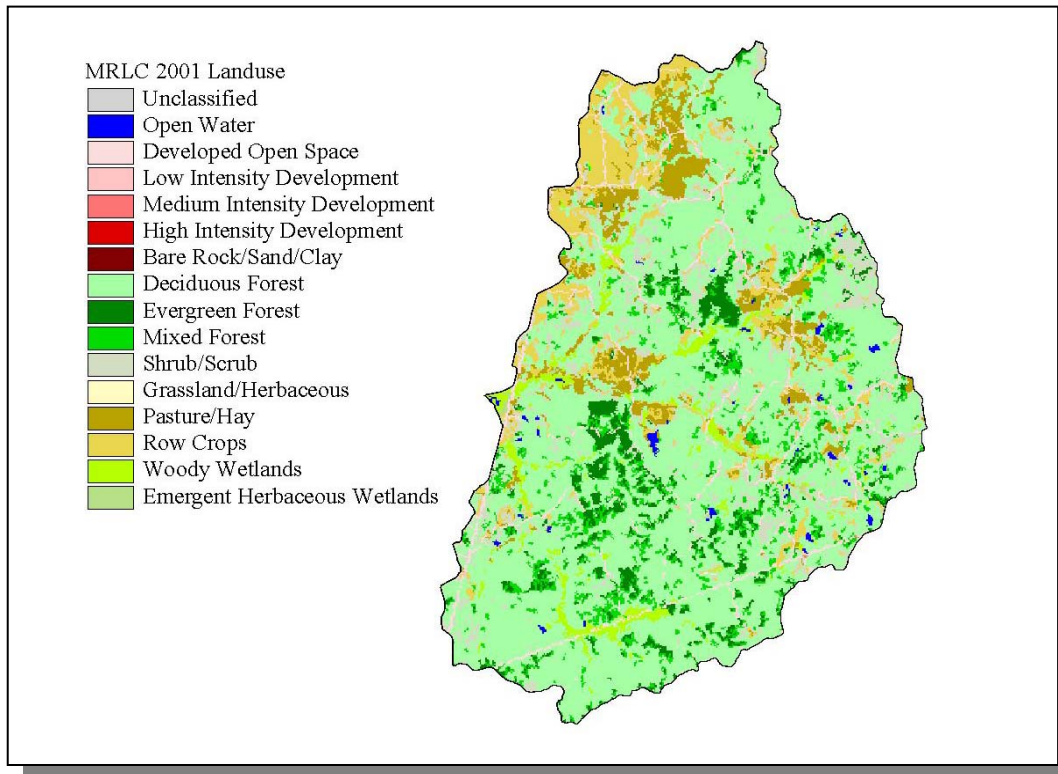


Figure 4-106. Illustration of Land Use Distribution in Subwatershed 080102080301.

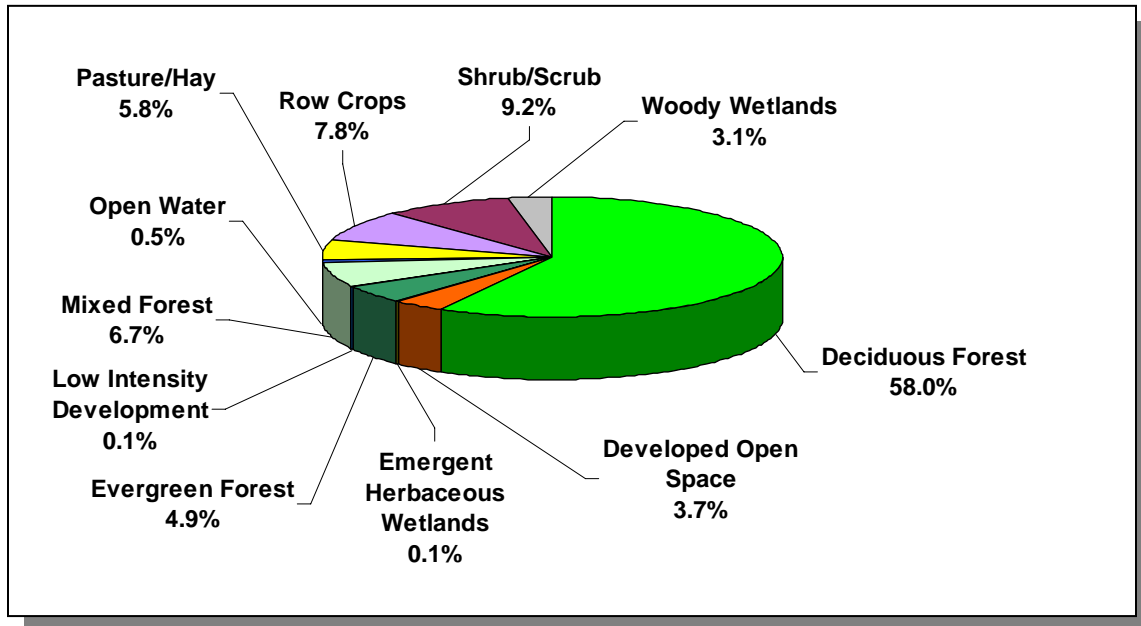


Figure 4-107. Land Use Distribution in Subwatershed 080102080301. More information is provided in Appendix IV.

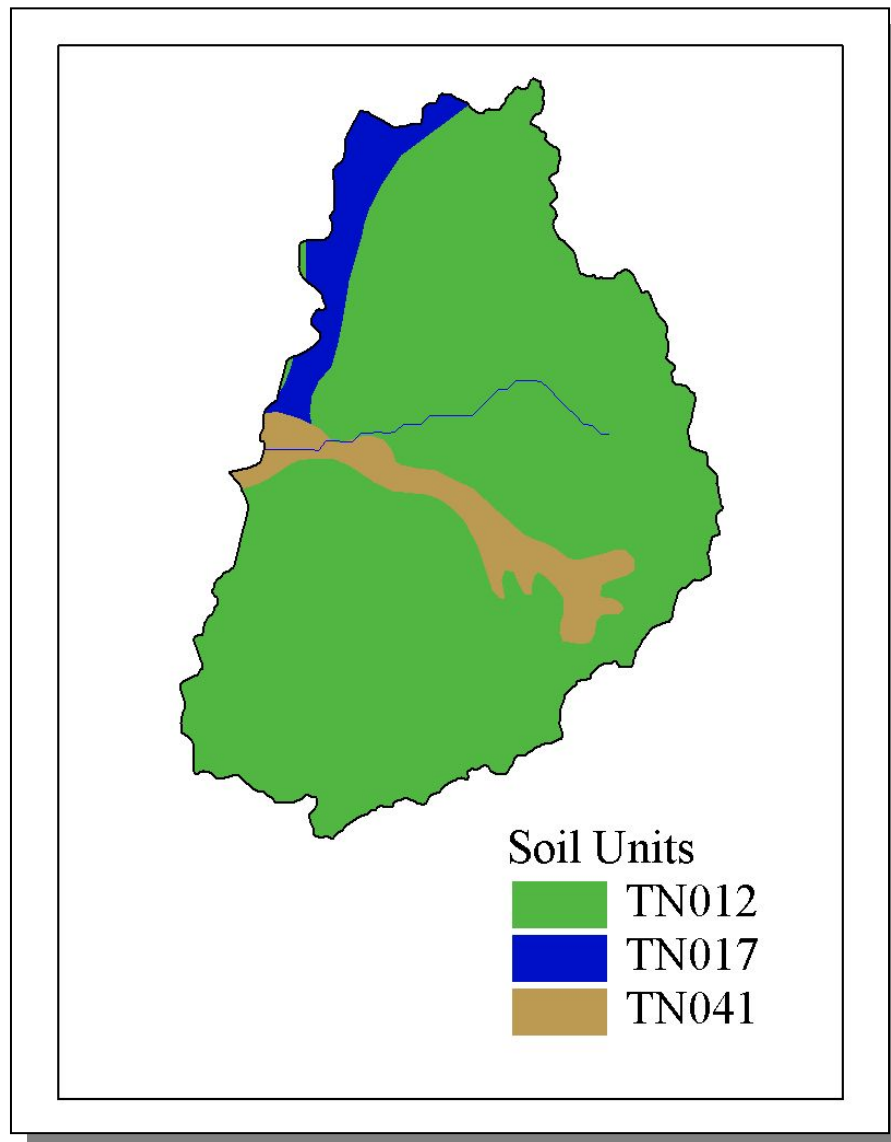


Figure 4-108. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080301.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN017	0.00	B	1.81	5.26	Silty Loam	0.45
TN041	59.00	C	1.35	4.98	Silty Loam	0.34

Table 4-87. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080301. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Chester	12,819	14,469	15,540	4.8	616	695	747	21.3
Hardeman	23,377	24,702	28,105	1.78	416	439	500	20.2
Madison	77,982	84,942	91,837	1.67	1,305	1,422	1,537	17.8
Total	114,178	124,113	135,482		2,337	2,556	2,784	19.1

Table 4-88. Population Estimates in Subwatershed 080102080301.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Medon	Madison	107	60	0	56	4

Table 4-89. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080301.

4.2.C.i.a. Point Source Contributions.



Figure 4-109. Location of Permits Issued in Subwatershed 080102080301. More information, including the names of facilities, is provided in Appendix IV.

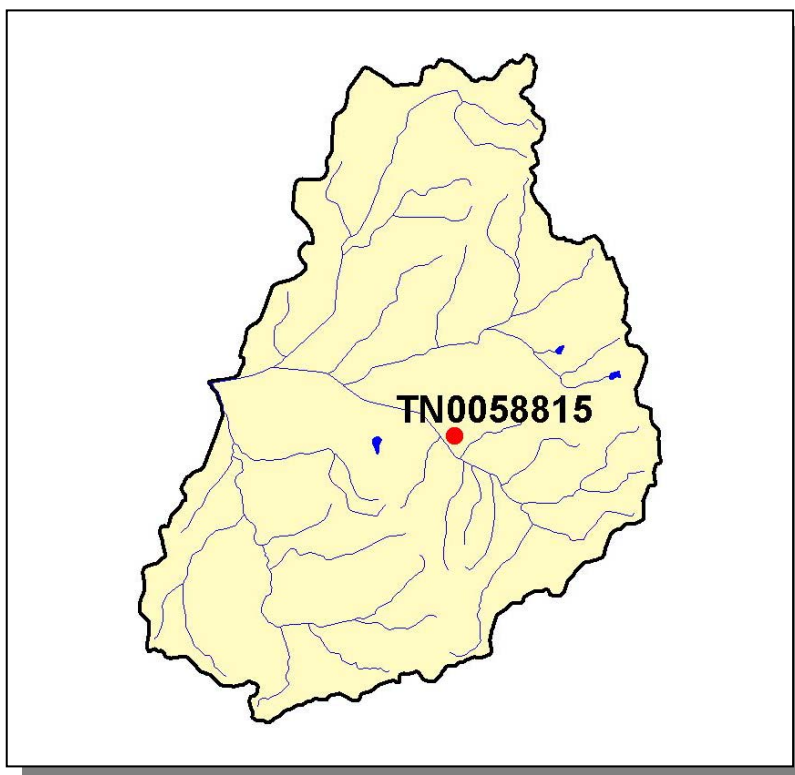


Figure 4-110. Location of Water Treatment Plants in Subwatershed 080102080301. More information, including the names of facilities, is provided in Appendix IV.

4.2.C.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
51	730	<5	236	<5

Table 4-90. Summary of Livestock Count Estimates in Subwatershed 080102080301. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Chester	0	9,108	0	14	1,334	0
Hardeman	9,184	15,877	62	28	5,221	144
Madison	0	12,437	0	476	10,210	0

Table 4-91. Summary of Livestock Count Estimates in Chester, Hardeman, and Madison Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Chester	99.4	99.4	0.3	1.3
Hardeman	247.1	247.1	5.0	18.6
Madison	140.7	140.7	2.4	11.5

Table 4-92. Forest Acreage and Annual Removal Rates (1987-1994) in Chester, Hardeman, and Madison Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.66
Grass (Hayland)	0.50
Legumes, Grass (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	1.41
Corn (Row Crops)	11.77
Cotton (Row Crops)	19.94
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	9.08
Wheat (Close-Grown Cropland)	10.20
All Other Close-Grown Cropland	0.47
Other Vegetable and Truck Crops	19.89
Summer fallow (Other Cropland)	6.11
Other Cropland not Planted	2.10
Conservation Reserve Program Lands	0.39
Other Land in Farms	0.08
Farmsteads and Ranch Headquarters	0.48

Table 4-93. Annual Estimated Total Soil Loss in Subwatershed 080102080301.

4.2.C.ii. 080102080302 (Clover Creek).

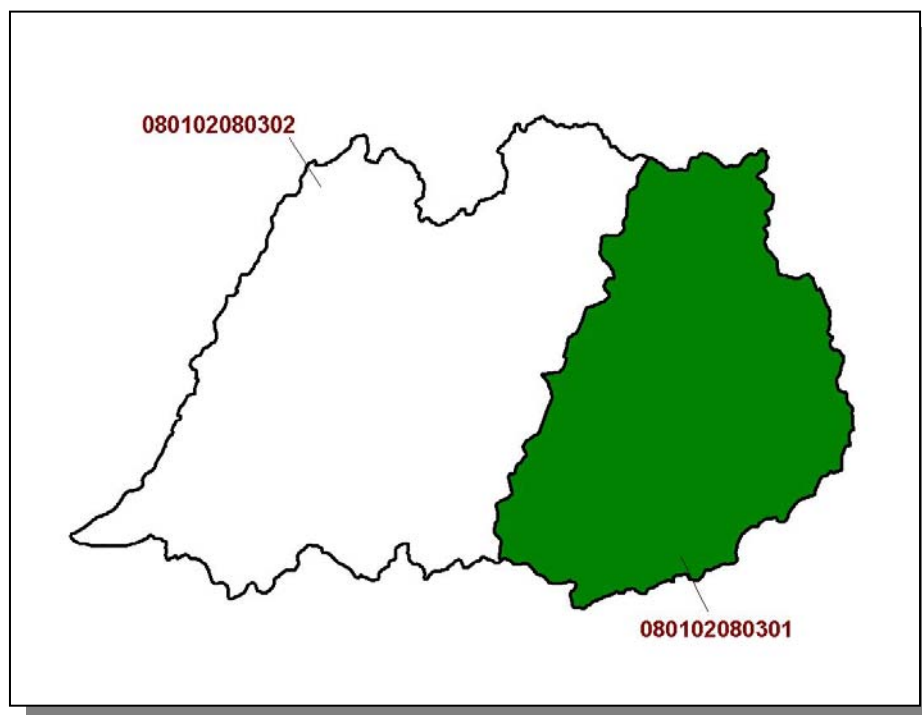


Figure 4-111. Location of Subwatershed 080102080302. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

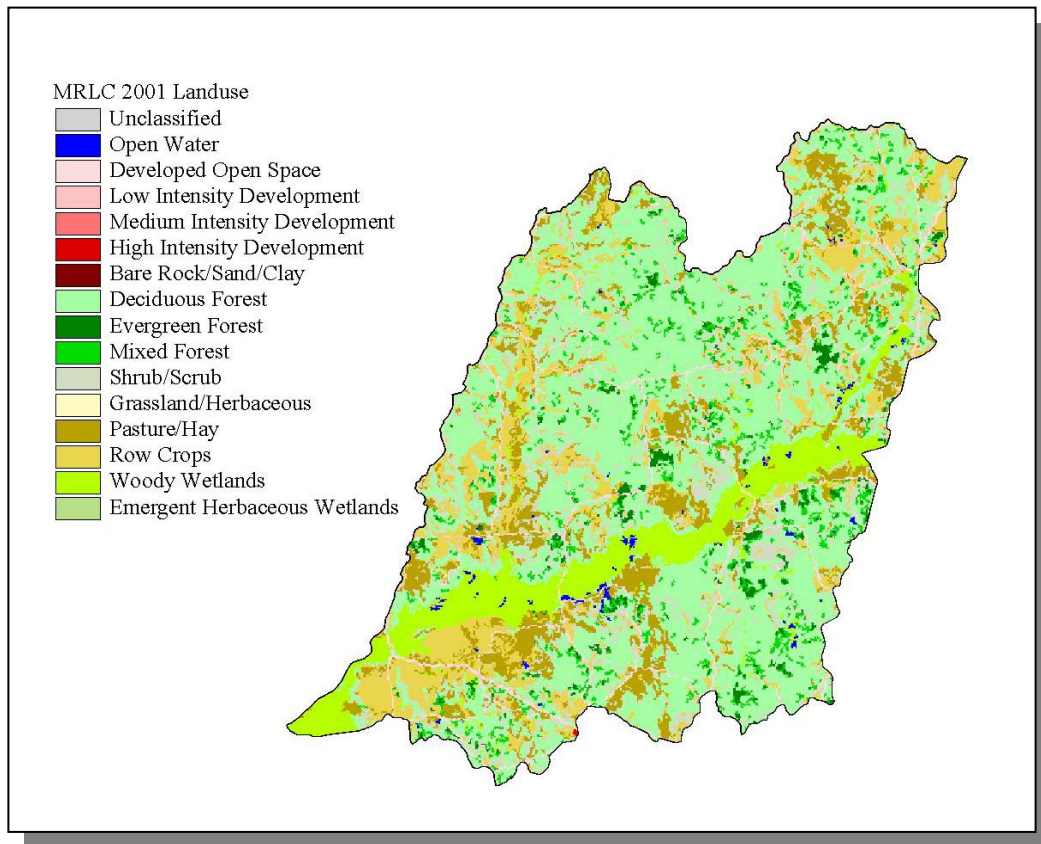


Figure 4-112. Illustration of Land Use Distribution in Subwatershed 080102080302.

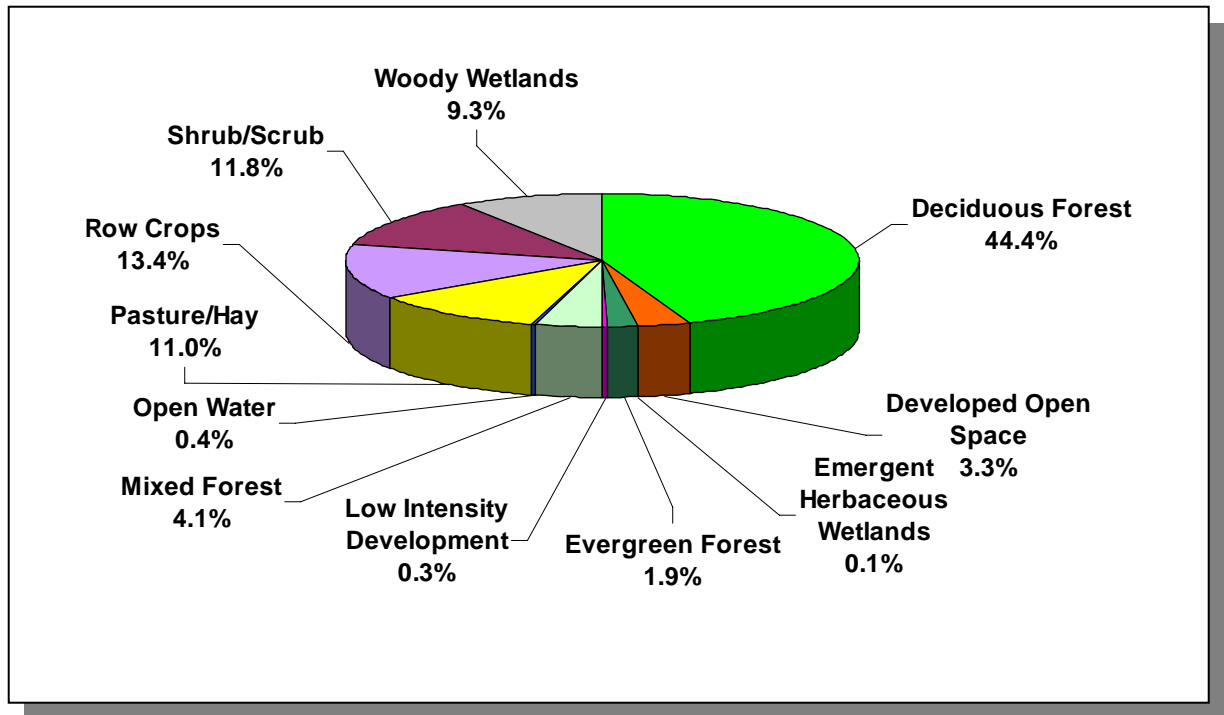


Figure 4-113. Land Use Distribution in Subwatershed 080102080302. More information is provided in Appendix IV.

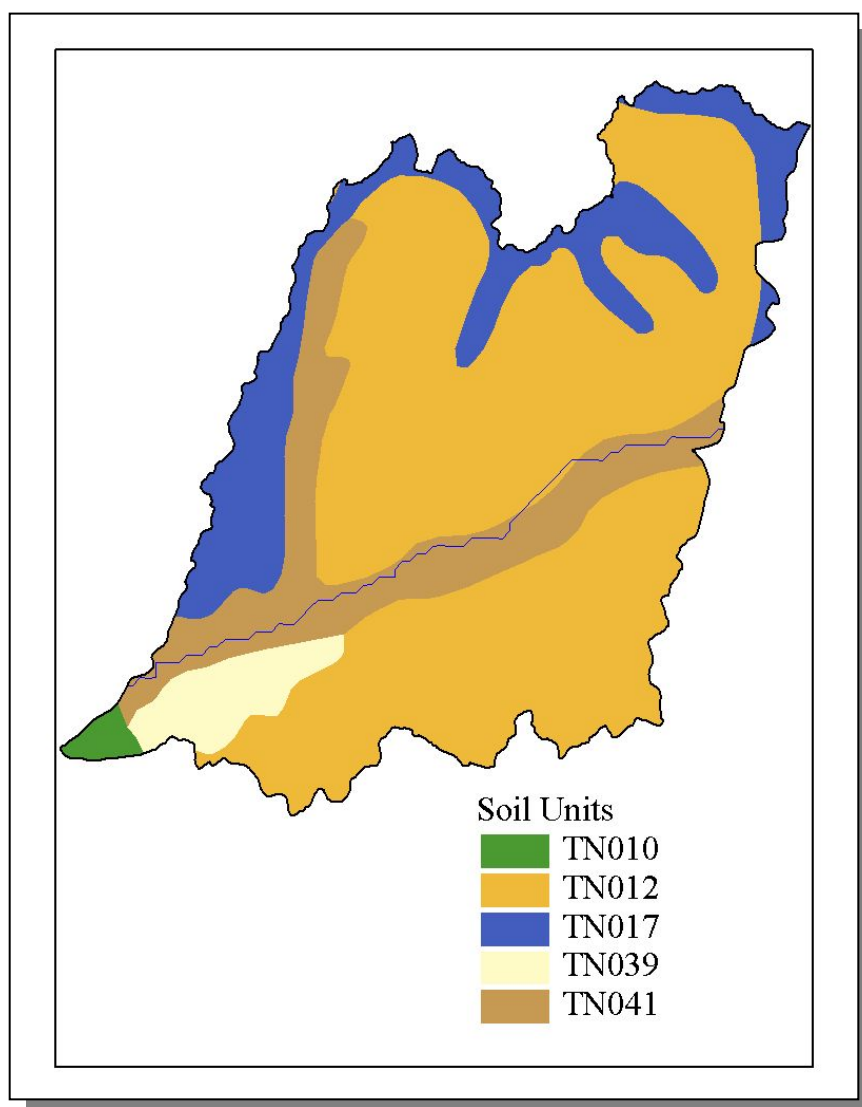


Figure 4-114. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080302.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN017	0.00	B	1.81	5.26	Silty Loam	0.45
TN039	24.00	C	1.35	5.20	Silty Loam	0.47
TN041	59.00	C	1.35	4.98	Silty Loam	0.34

Table 4-94. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080302. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	4.9	1,145	1,210	1,377	20.3
Madison	77,982	84,942	91,837	3.32	2,586	2,817	3,045	17.7
Total	101,359	109,644	119,942		3,731	4,027	4,422	18.5

Table 4-95. Population Estimates in Subwatershed 080102080302.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Medon	Hardeman	107	60	0	56	4
Toone	Hardeman	279	102	69	33	0
Total		387	162	69	89	4

Table 4-96. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080302.

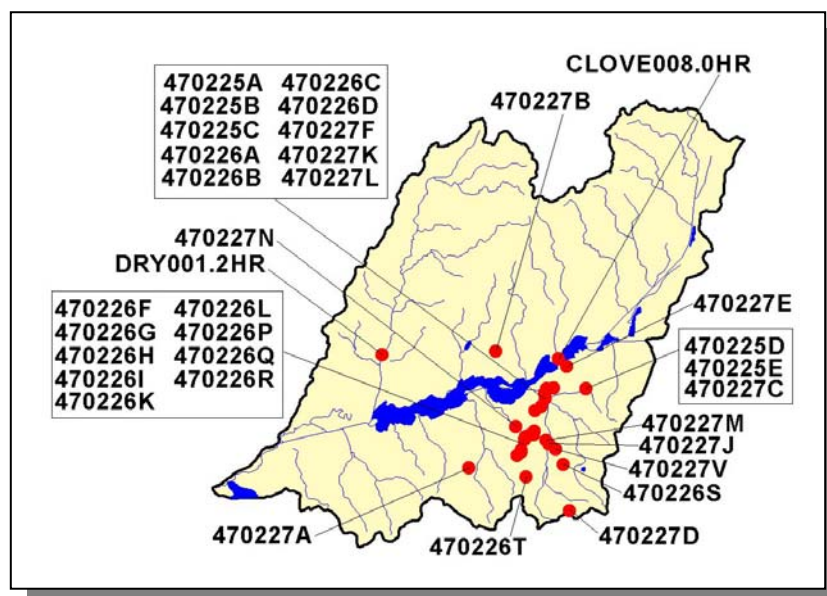


Figure 4-115. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080302. More information, including site names and locations, is provided in Appendix IV.

4.2.C.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.C.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
510	1,179	<5	<5	534	8

Table 4-97. Summary of Livestock Count Estimates in Subwatershed 080102080302.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
Madison	0	12,437	0	476	10,210	0

Table 4-98. Summary of Livestock Count Estimates in Hardeman and Madison Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
Madison	140.7	140.7	2.4	11.5

Table 4-99. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman and Madison Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.93
Grass (Hayland)	0.59
Grass, Forbs, Legumes (Mixed Pasture)	1.89
Corn (Row Crops)	12.64
Cotton (Row Crops)	21.13
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	11.35
Wheat (Close-Grown Cropland)	10.85
All Other Close-Grown Cropland	0.47
Other Vegetable and Truck Crops	7.81
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	3.51
Conservation Reserve Program Lands	0.34
Other Land in Farms	0.08
Farmsteads and Ranch Headquarters	0.78

Table 4-100. Annual Estimated Total Soil Loss in Subwatershed 080102080302.

4.2.D. 0801020804.

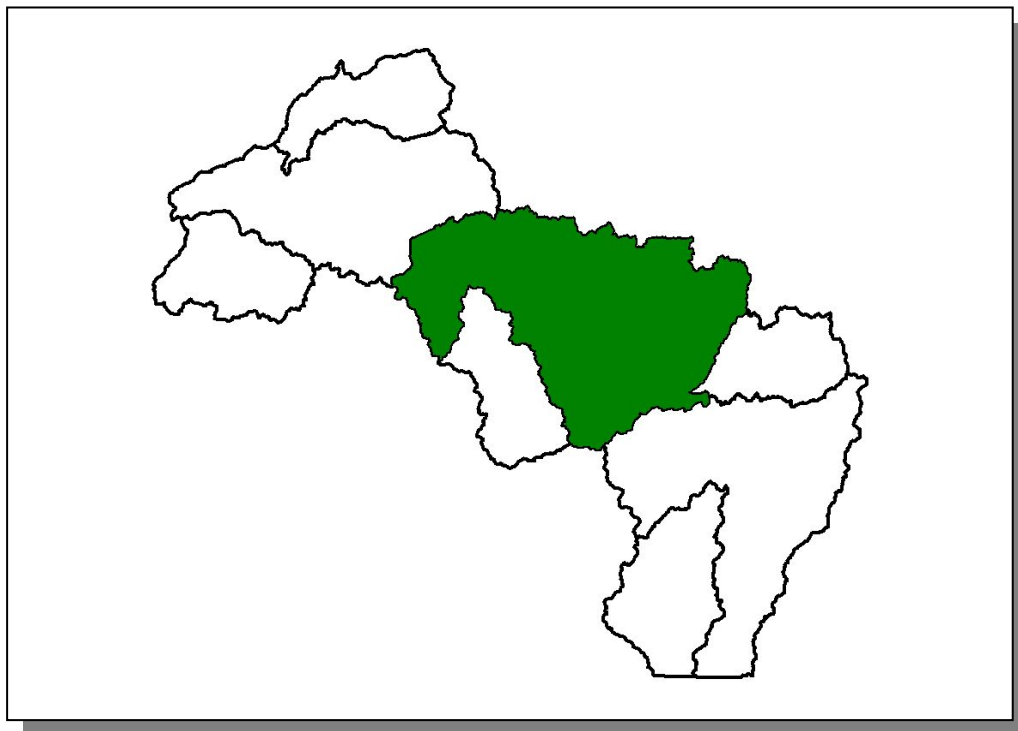


Figure 4-116. Location of Subwatershed 0801020804. Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.D.i. 080102080401 (Hatchie River).

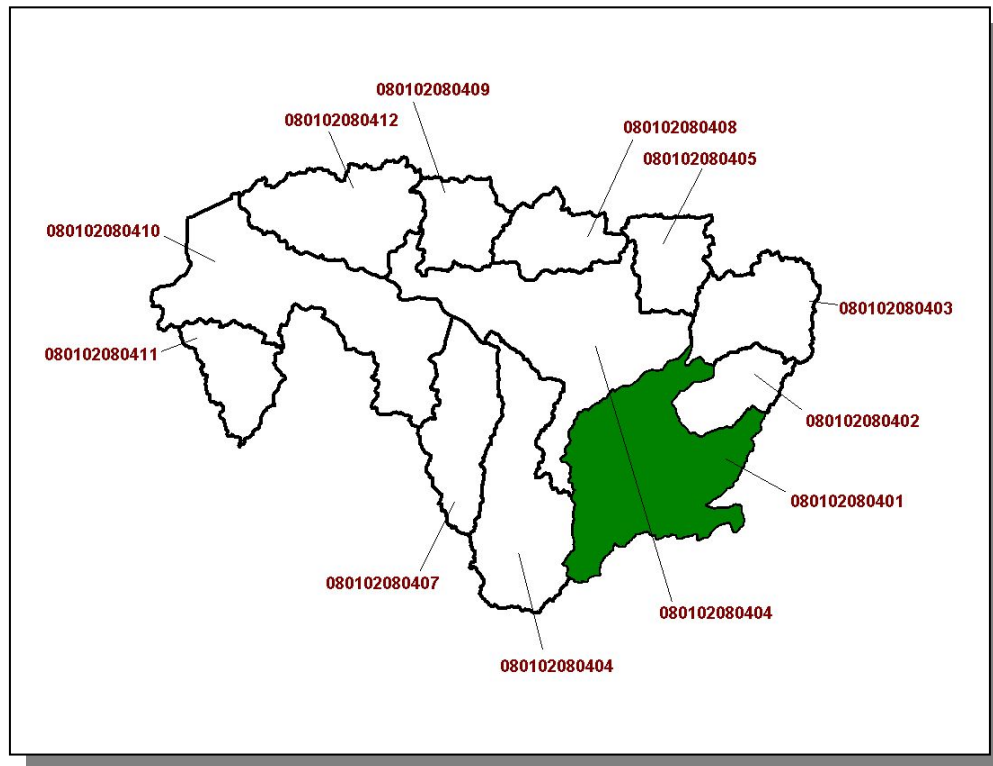


Figure 4-117. Location of Subwatershed 080102080401. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

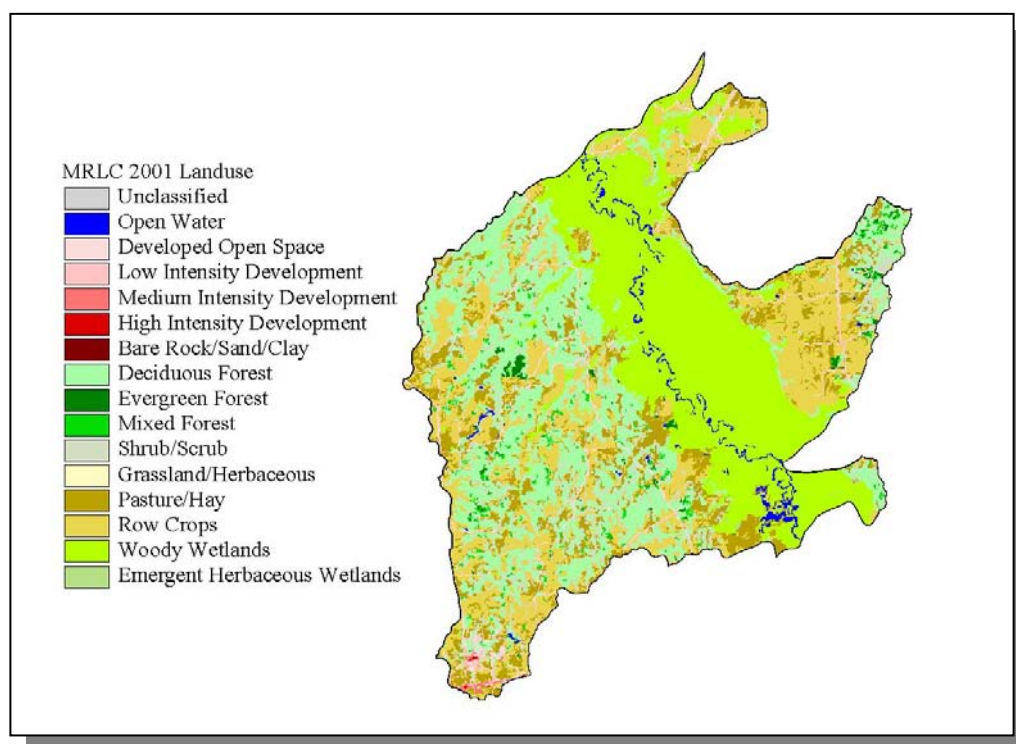


Figure 4-118. Illustration of Land Use Distribution in Subwatershed 080102080401.

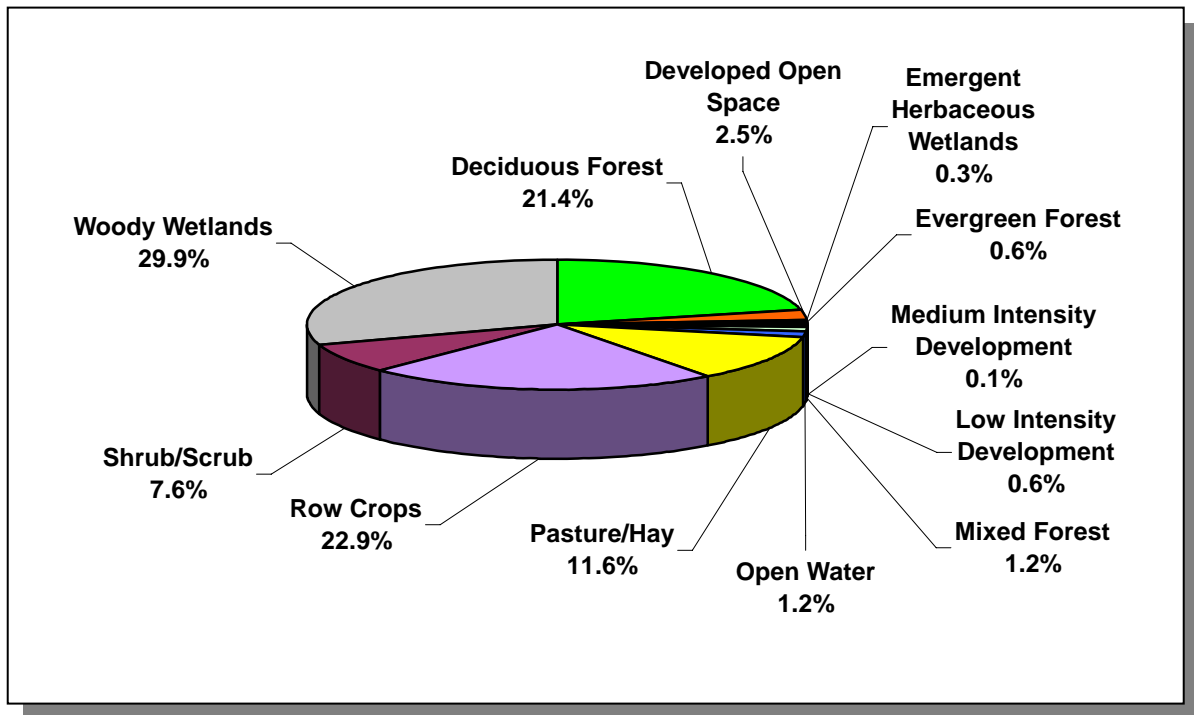


Figure 4-119. Land Use Distribution in Subwatershed 080102080401. More information is provided in Appendix IV.

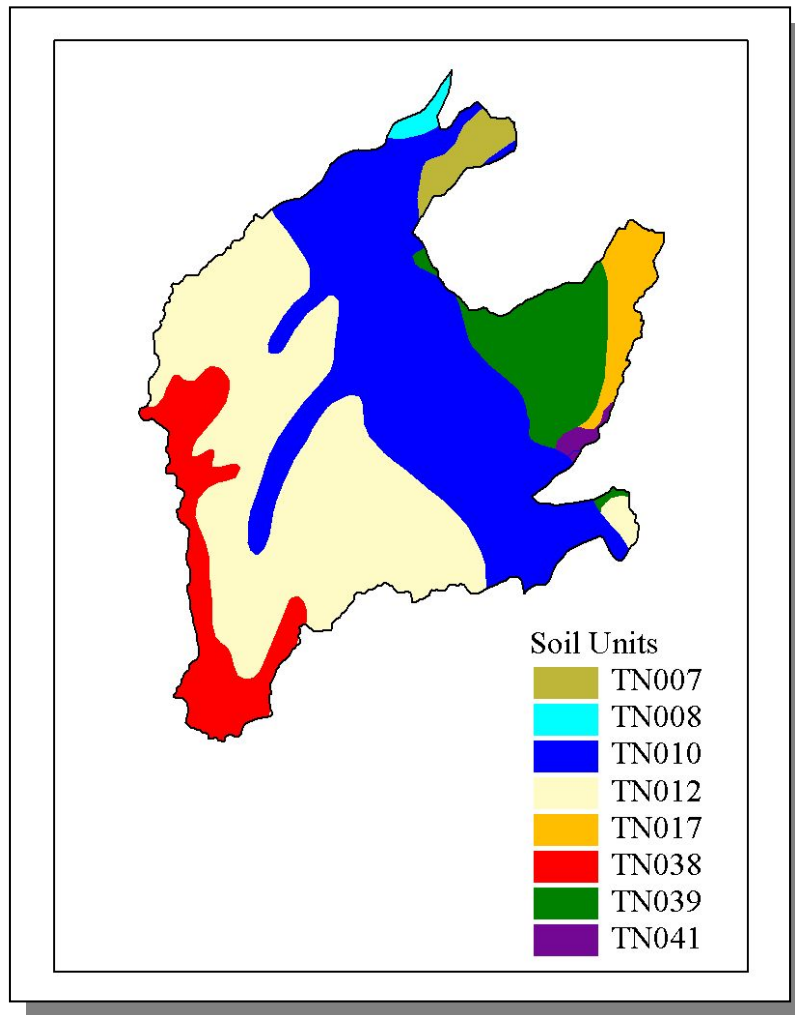


Figure 4-120. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080401.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN017	0.00	B	1.81	5.26	Silty Loam	0.45
TN038	9.00	C	1.65	5.20	Silty Loam	0.46
TN039	24.00	C	1.35	5.20	Silty Loam	0.47
TN041	59.00	C	1.35	4.98	Silty Loam	0.34

Table 4-101. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080401. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	7.52	1,758	1,857	2,113	20.2
Haywood	19,437	19,709	19,797	0.99	193	196	197	2.1
Madison	77,982	84,942	91,837	0.6	466	507	548	17.6
Total	120,796	129,353	139,739		2,417	2,560	2,858	18.2

Table 4-102. Population Estimates in Subwatershed 080102080401.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Whiteville	Hardeman	1,050	444	424	20	0

Table 4-103. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080401.

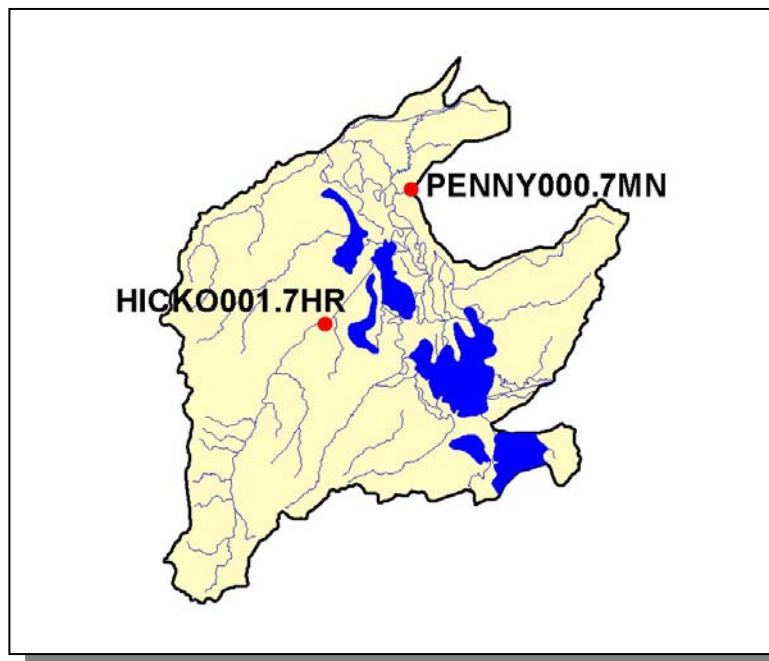


Figure 4-121. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080401. More information, including site names and locations, is provided in Appendix IV.

4.2.D.i.a. Point Source Contributions.

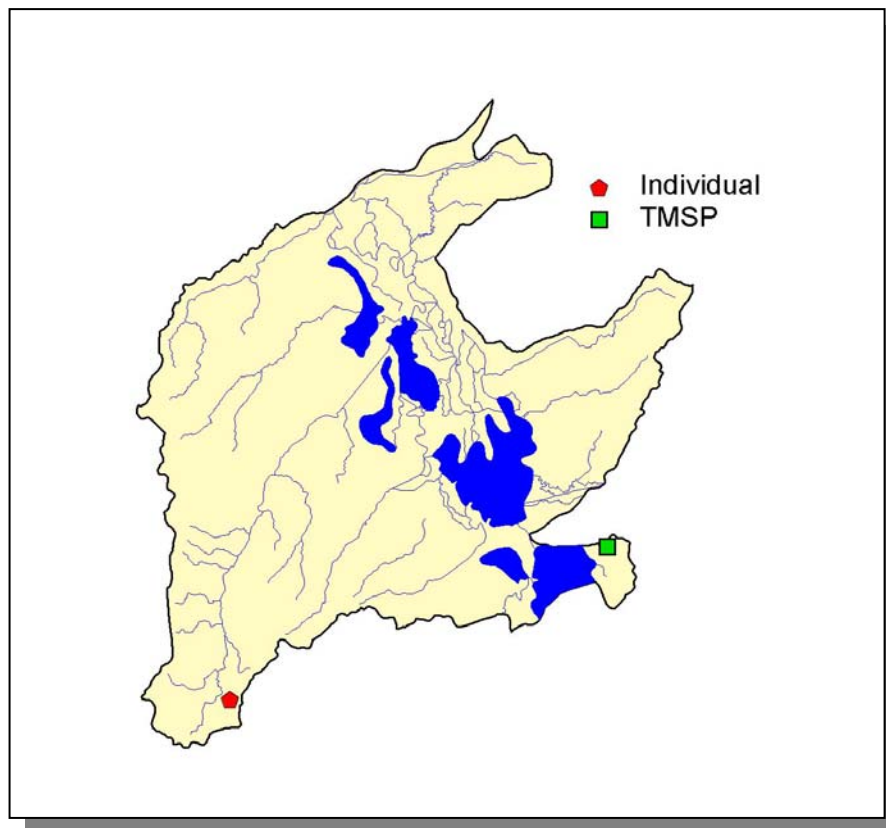


Figure 4-122. Location of Permits Issued in Subwatershed 080102080401. More information, including the names of facilities, is provided in Appendix IV.

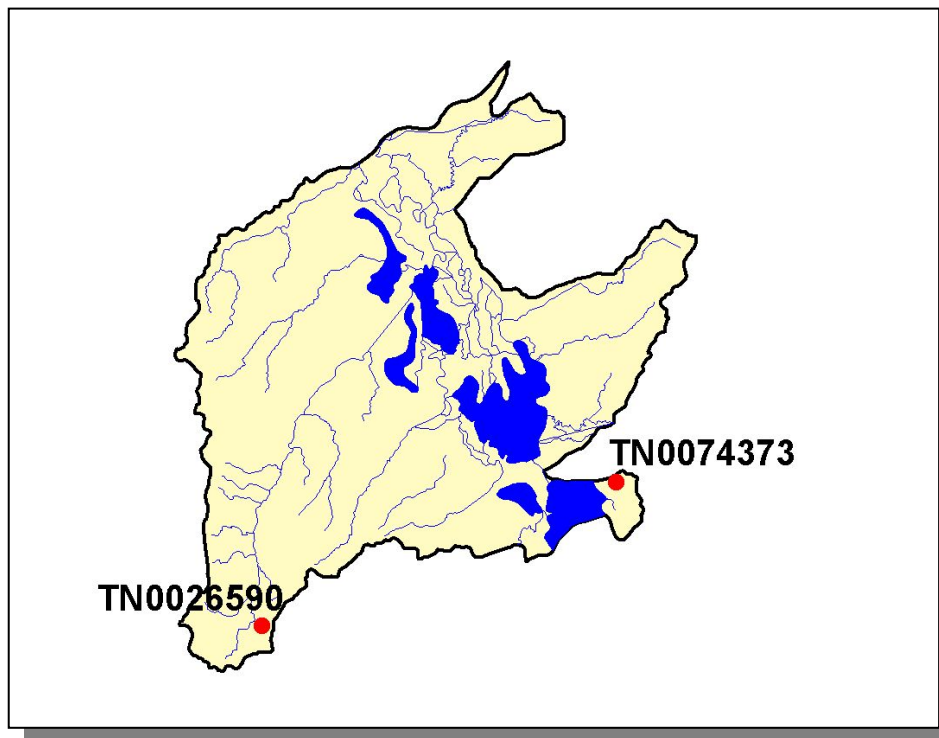


Figure 4-123. Location of Active NPDES Sites in Subwatershed 080102080401. More information, including the names of facilities, is provided in Appendix IV.

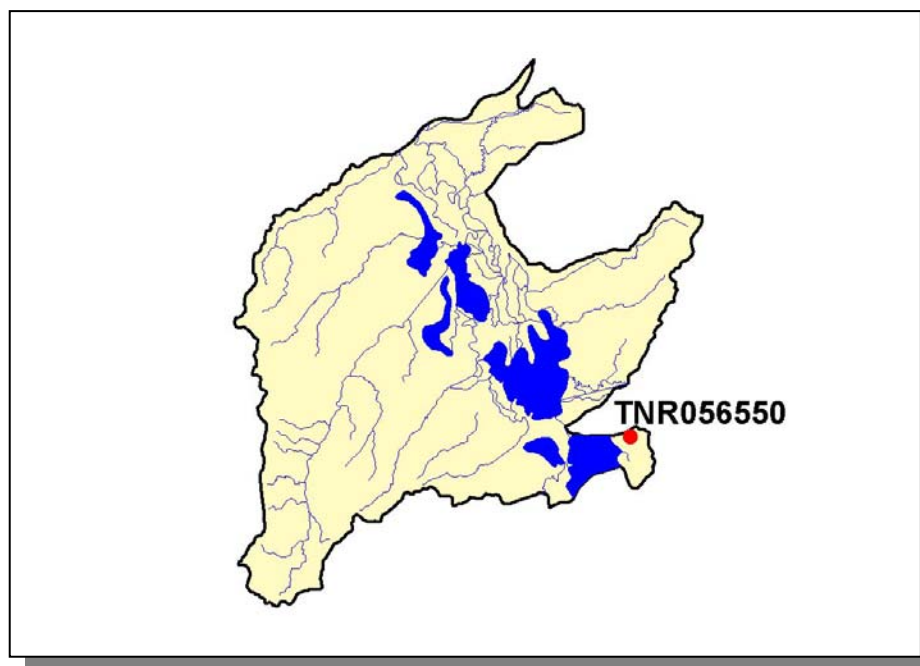


Figure 4-124. Location of TMSP Sites in Subwatershed 080102080401. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.i.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2004 303(d) list in Subwatershed 080102080401:

- TN0026590 (Whiteville STP) discharges to Hickory Creek @ RM 7.7

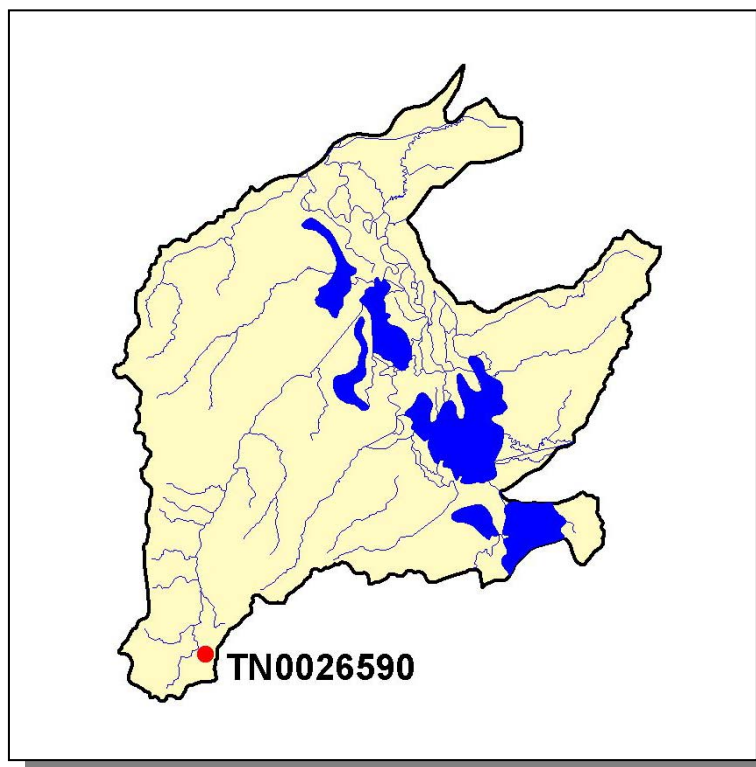


Figure 4-125. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 080102080401. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	3Q2	1Q10	3Q10	3Q20	7Q10
TN0026590	0.07	na	0.06	0.05	0.05

Table 4-104. Receiving Stream Low Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080401. Data are in cubic feet per second (CFS). Data were obtained from the USGS web application StreamStats at <http://water.usgs.gov/osw/streamstats/>. (na, data not available)

PERMIT #	NO ₃	Zn	Cu	Ni	Mo	As	Se	Flow
TN0026590	X	X	X	X	X	X	X	X

Table 4-105. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080401.

PERMIT #	WET	CBOD ₅	NH ₃	TRC	TSS	SETTLEABLE SOLIDS	DO	pH	Pb	Hg	Cd
TN0026590	X	X	X	X	X	X	X	X	X	X	X

Table 4-106. Inorganic Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080401.
WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids; DO, Dissolved Oxygen.

PERMIT #	<i>E. coli</i>	FECAL COLIFORM
TN0026590	X	X

Table 4-107. Bacteria Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080401.

4.2.D.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
978	1,810	7	<5	653	15

Table 4-108. Summary of Livestock Count Estimates in Subwatershed 080102080401. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
Haywood	3,442	6,220	29	237	1,740	12
Madison	0	12,437	0	476	10,210	0

Table 4-109. Summary of Livestock Count Estimates in Hardeman, Haywood, and Madison Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
Haywood	71.2	71.2	1.7	6.4
Madison	140.7	140.7	2.4	11.5

Table 4-110. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman, Haywood, and Madison Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.13
Grass (Hayland)	0.72
Grass, Forbs, Legumes (Mixed Pasture)	1.12
Corn (Row Crops)	11.24
Cotton (Row Crops)	23.84
Sorghum (Row Crops)	3.14
Soybeans (Row Crops)	12.12
Wheat (Close-Grown Cropland)	14.31
Fruit (Horticultural)	0.76
All Other Close-Grown Cropland	2.08
Summer Fallow (Other Cropland)	6.11
Other Vegetable and Truck Crops	5.58
Other Cropland not Planted	3.81
Conservation Reserve Program Lands	0.34
Other Land in Farms	1.13
Farmsteads and Ranch Headquarters	0.90

Table 4-111. Annual Estimated Total Soil Loss in Subwatershed 080102080401.

4.2.D.ii. 080102080402 (Muddy Creek).

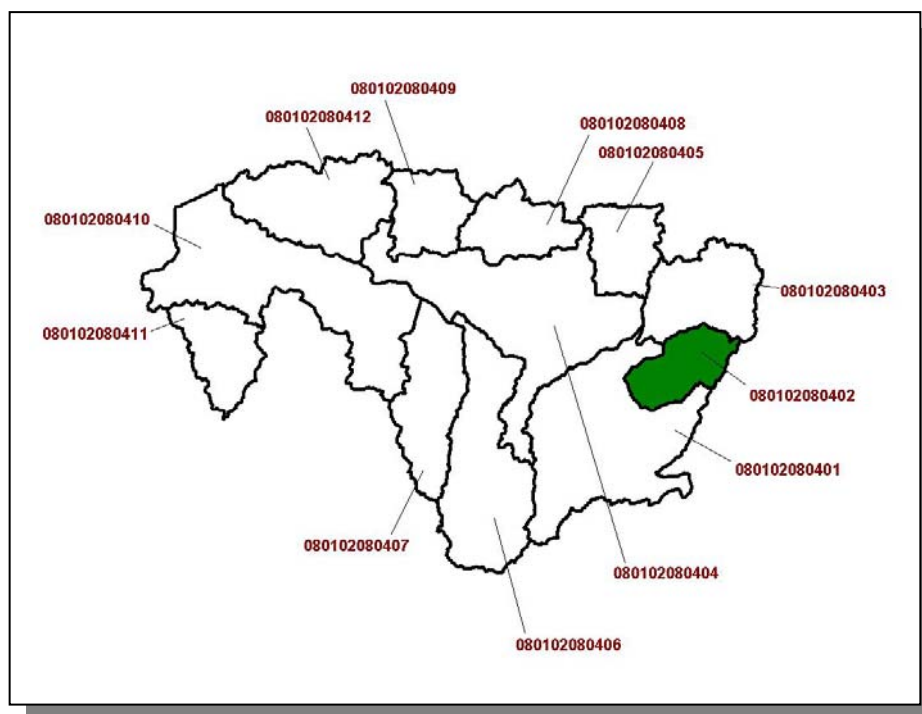


Figure 4-126. Location of Subwatershed 080102080402. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

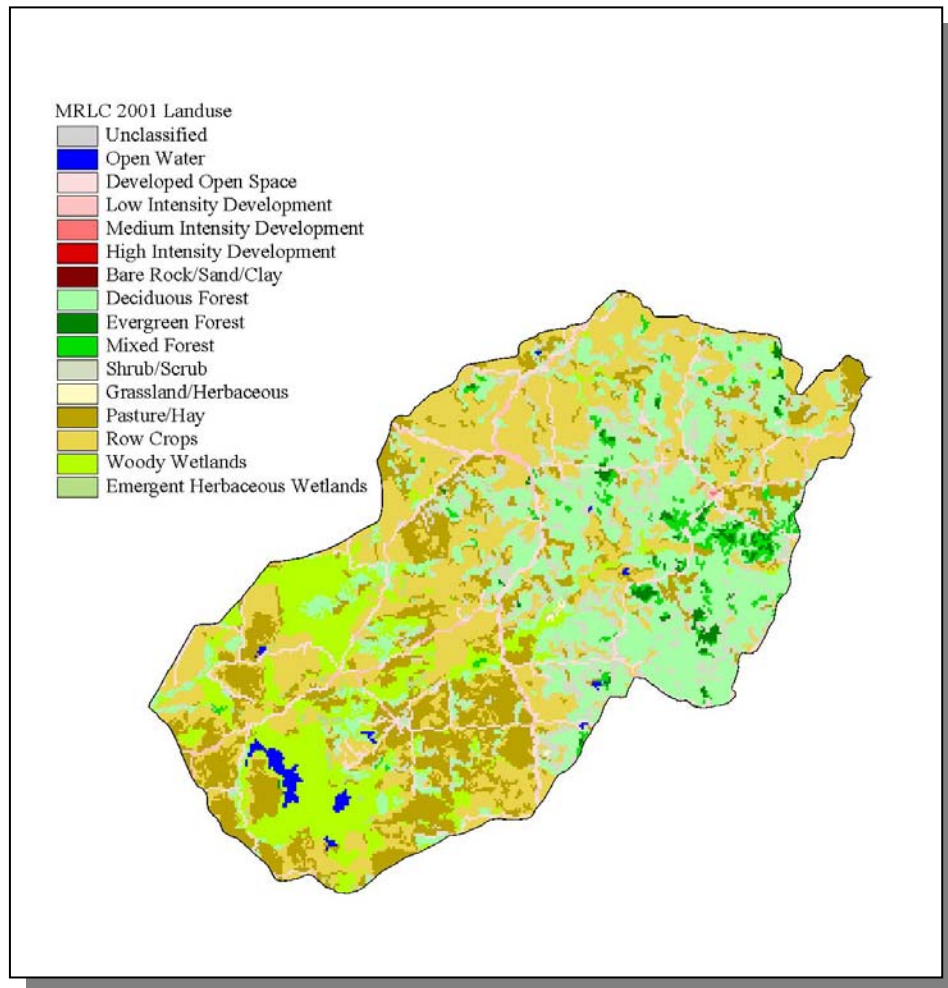


Figure 4-127. Illustration of Land Use Distribution in Subwatershed 080102080402.

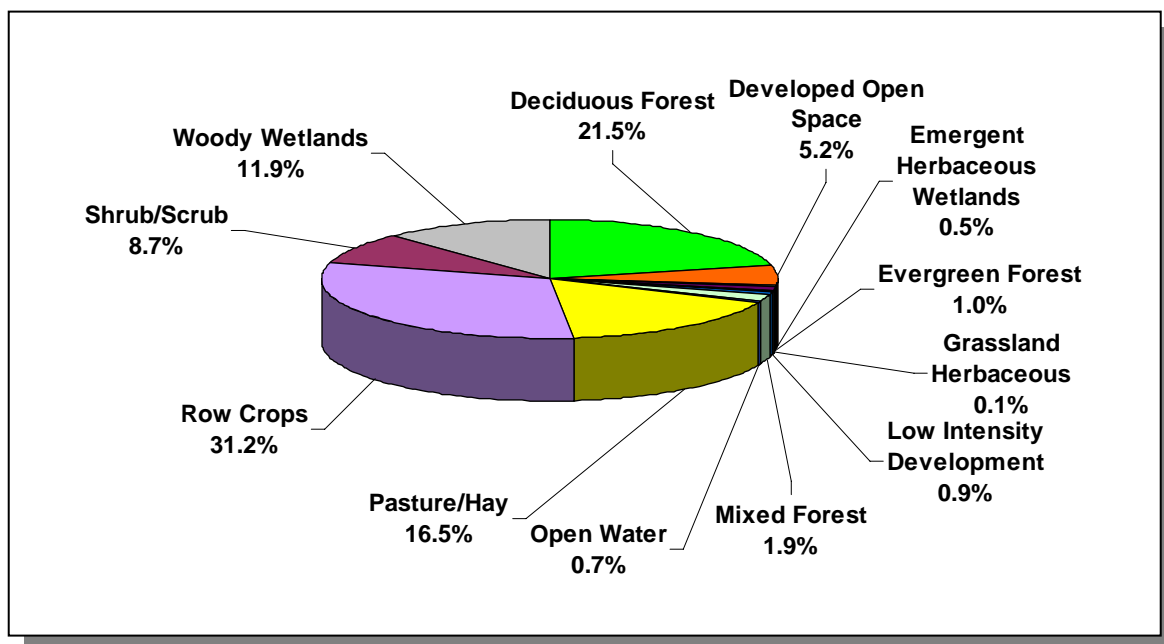


Figure 4-128. Land Use Distribution in Subwatershed 080102080402. More information is provided in Appendix IV.

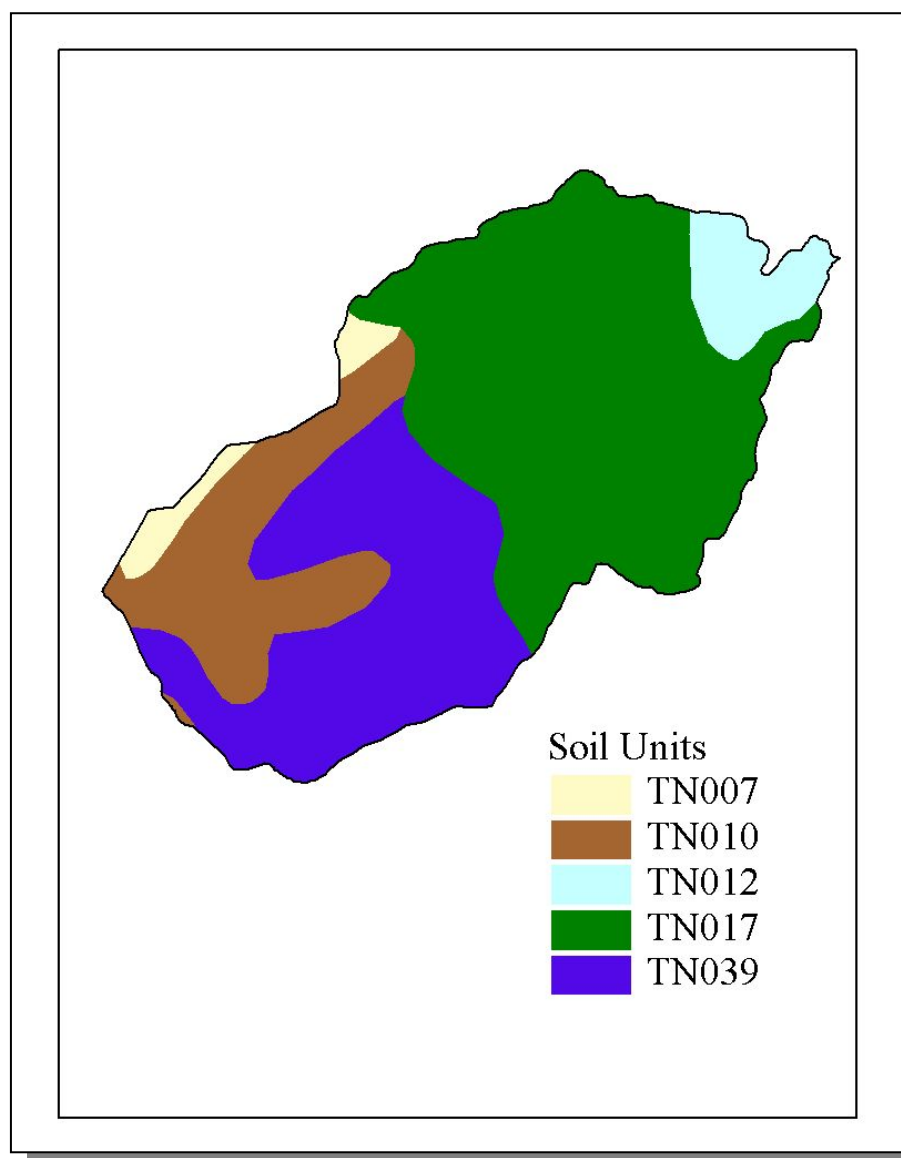


Figure 4-129. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080402.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN017	0.00	B	1.81	5.26	Silty Loam	0.45
TN039	24.00	C	1.35	5.20	Silty Loam	0.47

Table 4-112. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080402. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	0.3	71	75	85	19.7
Madison	77,982	84,942	91,837	2.36	1,842	2,007	2,170	17.8
Total	101,359	109,644	119,942		1,913	2,082	2,255	17.9

Table 4-113. Population Estimates in Subwatershed 080102080402.

4.2.D.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
52	407	<5	290	<5

Table 4-114. Summary of Livestock Count Estimates in Subwatershed 080102080402.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
Madison	0	12,437	0	476	12,210	0

Table 4-115. Summary of Livestock Count Estimates in Hardeman and Madison Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
Madison	140.7	140.7	2.4	11.5

Table 4-116. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman and Madison Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.52
Grass (Hayland)	0.88
Grass, Forbs, Legumes (Mixed Pasture)	3.04
Corn (Row Crops)	14.36
Cotton (Row Crops)	14.66
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	9.21
Wheat (Close-Grown Cropland)	5.05
All Other Close-Grown Cropland	0.47
Other Vegetable and Truck Crops	7.81
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	2.50
Conservation Reserve Program Lands	0.44
Other Land in Farms	0.08
Farmsteads and Ranch Headquarters	0.52

Table 4-117. Annual Estimated Total Soil Loss in Subwatershed 080102080402.

4.2.D.iii. 080102080403 (Big Black Creek).

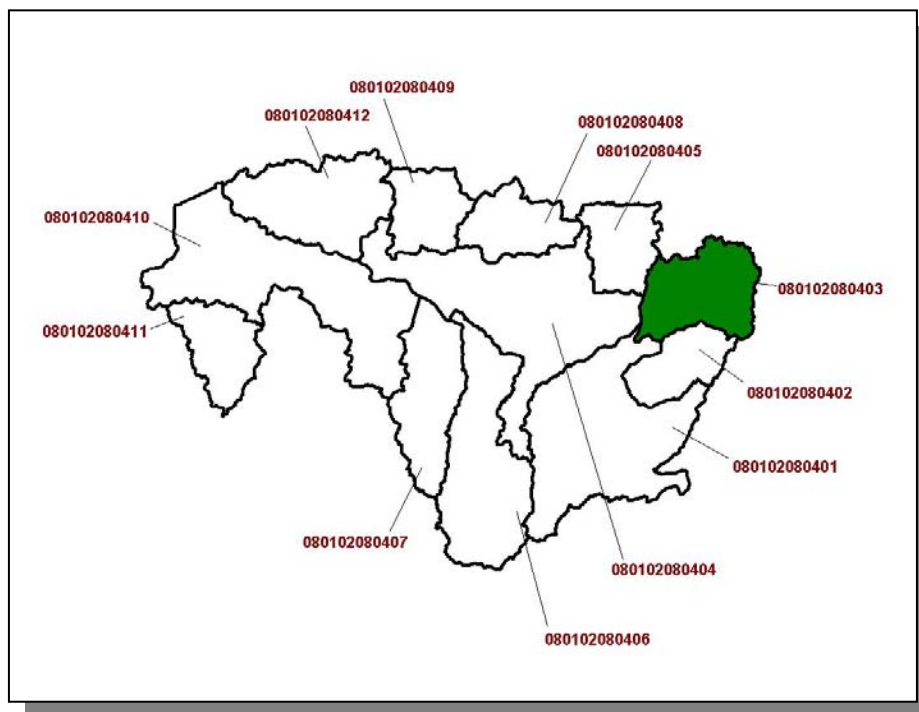


Figure 4-130. Location of Subwatershed 080102080403. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

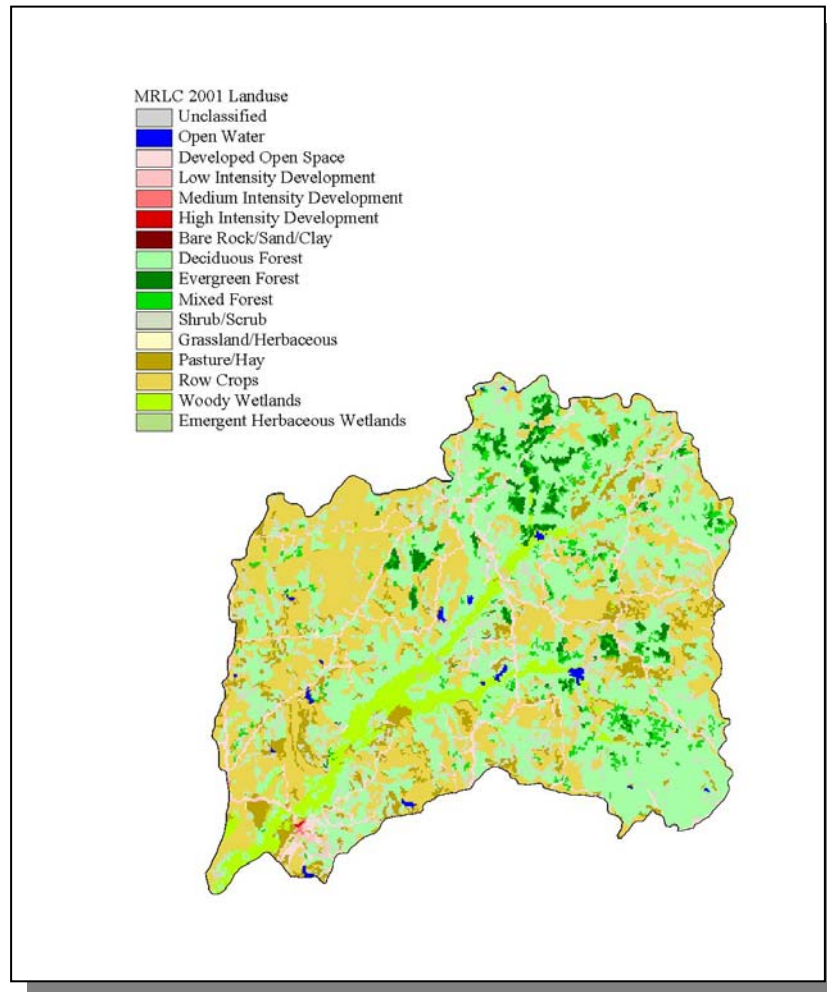


Figure 4-131. Illustration of Land Use Distribution in Subwatershed 080102080403.

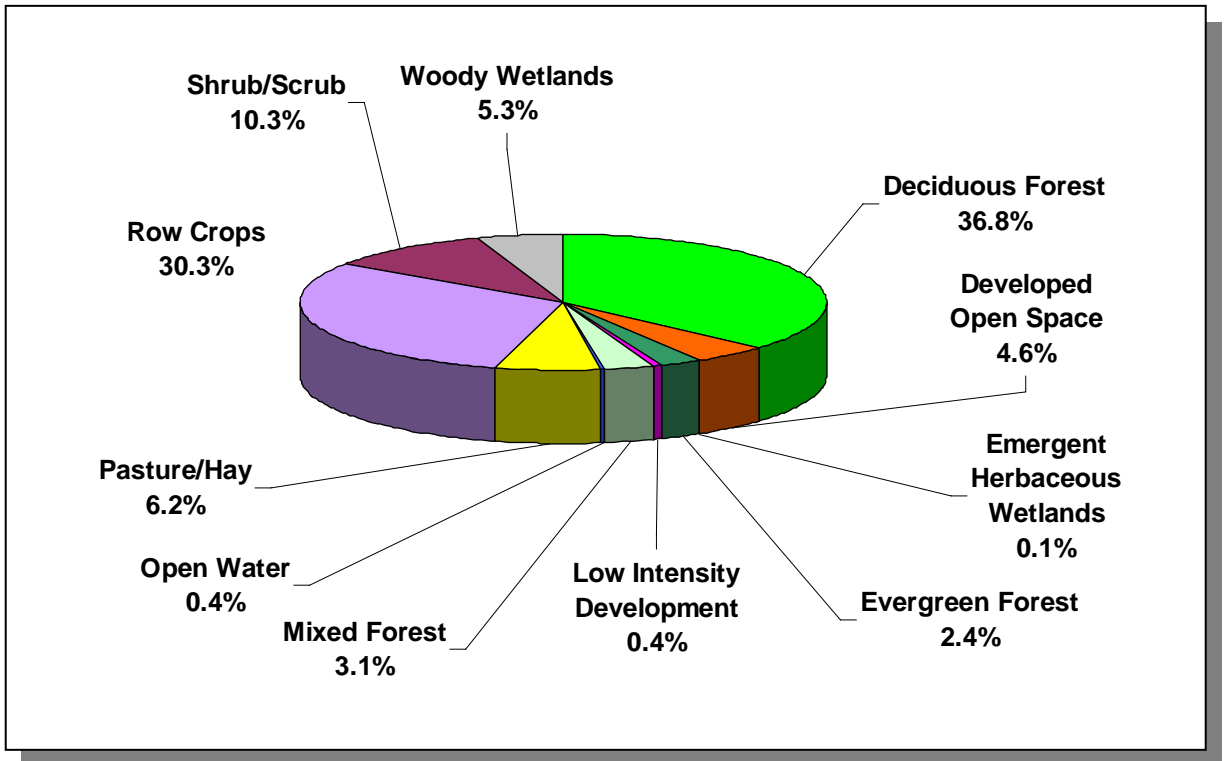


Figure 4-132. Land Use Distribution in Subwatershed 080102080403. More information is provided in Appendix IV.

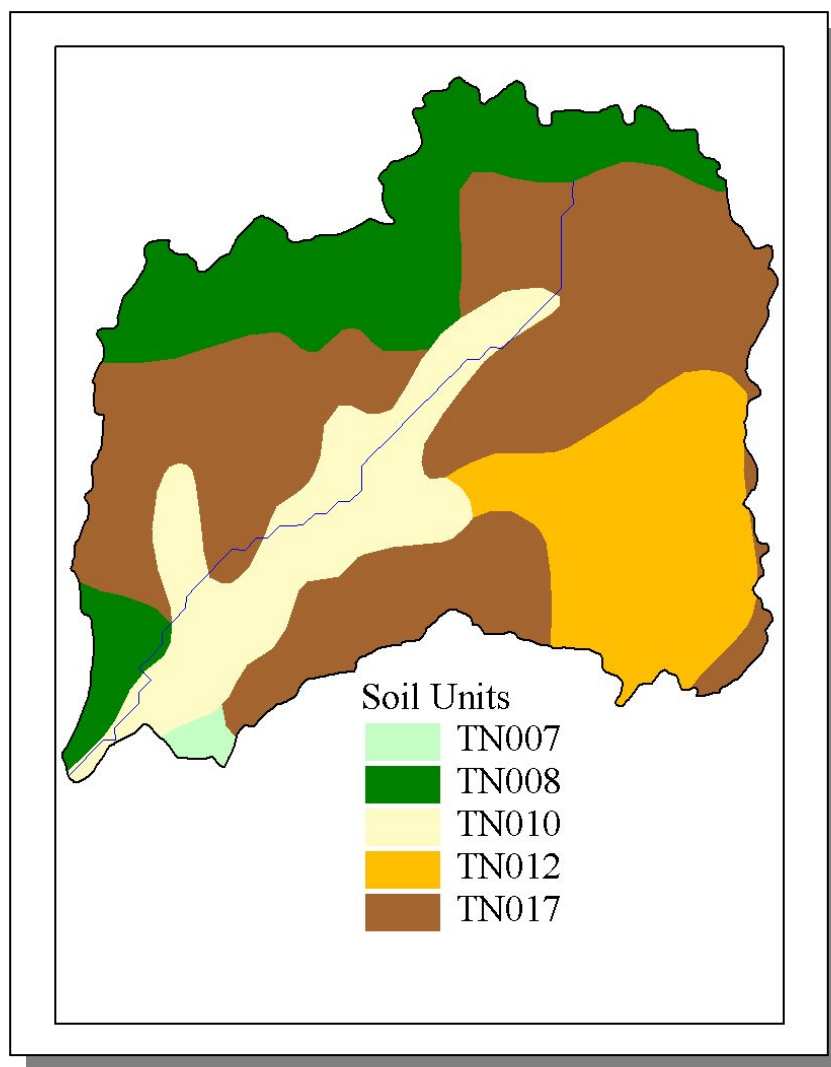


Figure 4-133. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080403.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN017	0.00	B	1.81	5.26	Silty Loam	0.45

Table 4-118. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080403. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Madison	77,982	84,942	91,837	4.5	3,512	3,825	4,136	17.8

Table 4-119. Population Estimates in Subwatershed 080102080403.

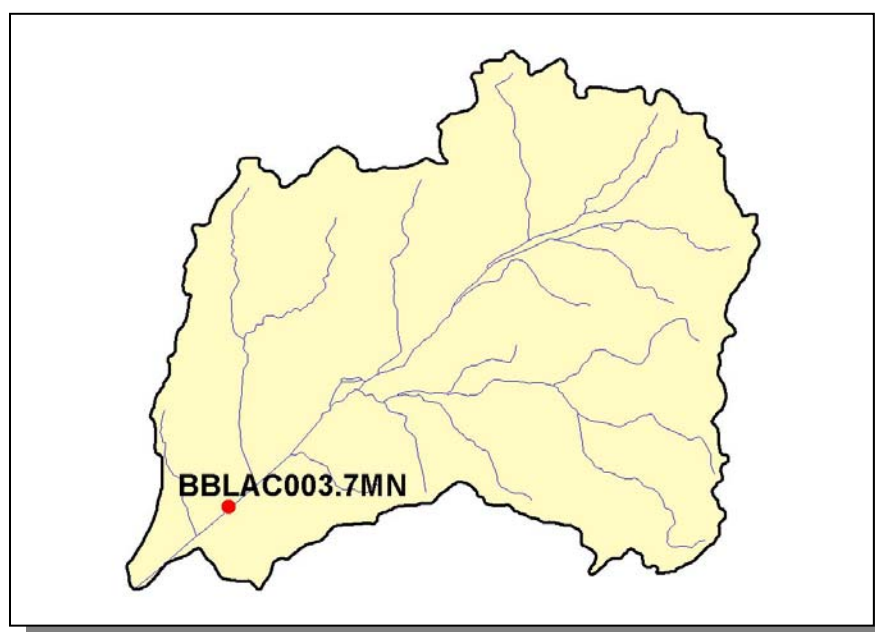


Figure 4-134. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080403. More information, including site names and locations, is provided in Appendix IV.

4.2.D.iii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS	
Cattle	Hogs
337	277

Table 4-120. Summary of Livestock Count Estimates in Subwatershed 080102080403. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS			
County	Cattle	Chickens (Layers)	Hogs
Madison	12,437	476	10,210

Table 4-121. Summary of Livestock Count Estimates in Madison County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Madison	140.7	140.7	2.4	11.5

Table 4-122. Forest Acreage and Annual Removal Rates (1987-1994) in Madison County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.41
Grass (Hayland)	0.95
Grass, Forbs, Legumes (Mixed Pasture)	3.34
Corn (Row Crops)	14.81
Cotton (Row Crops)	12.97
Soybeans (Row Crops)	8.65
Wheat (Close-Grown Cropland)	3.53
All Other Close-Grown Cropland	0.47
Other Vegetable and Truck Crops	7.81
Other Cropland not Planted	2.23
Conservation Reserve Program Lands	0.47
Other Land in Farms	0.08
Farmsteads and Ranch Headquarters	0.46

Table 4-123. Annual Estimated Total Soil Loss in Subwatershed 080102080403.

4.2.D.iv. 080102080404 (Hatchie River).

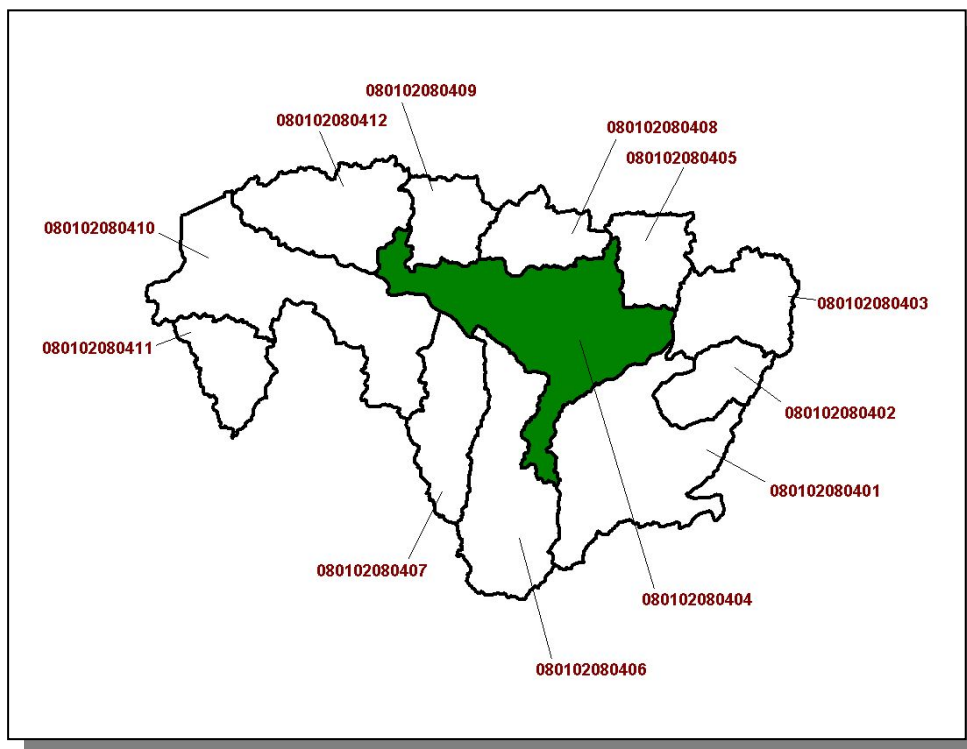


Figure 4-135. Location of Subwatershed 080102080404. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

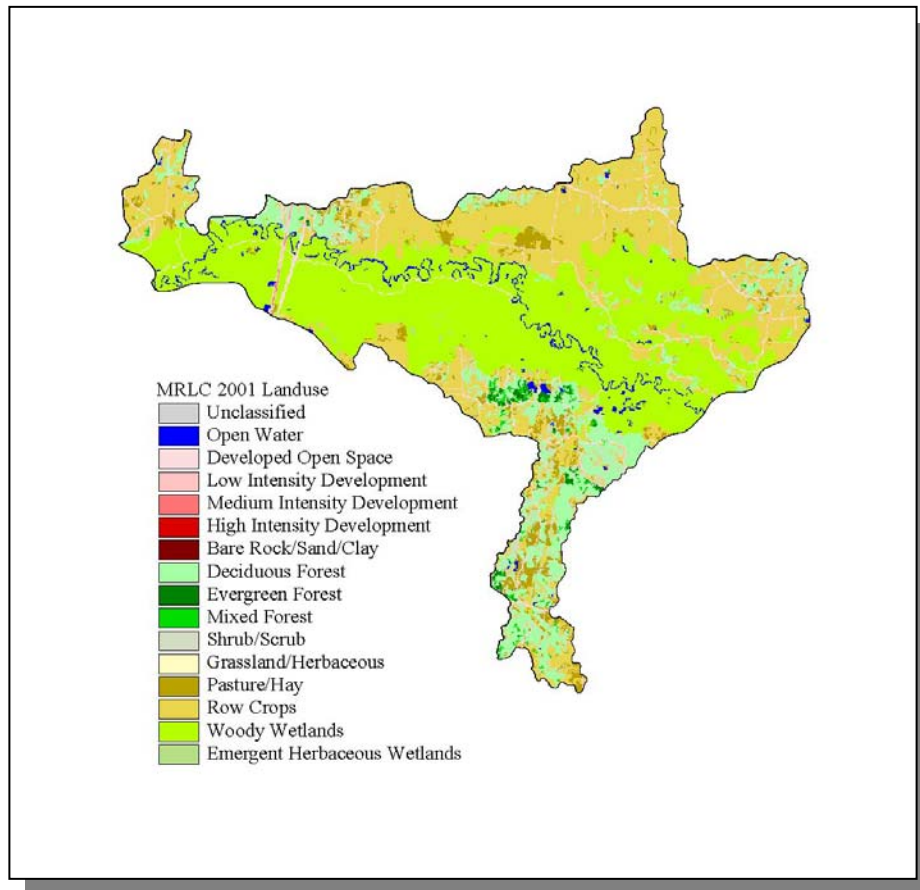


Figure 4-136. Illustration of Land Use Distribution in Subwatershed 080102080404.

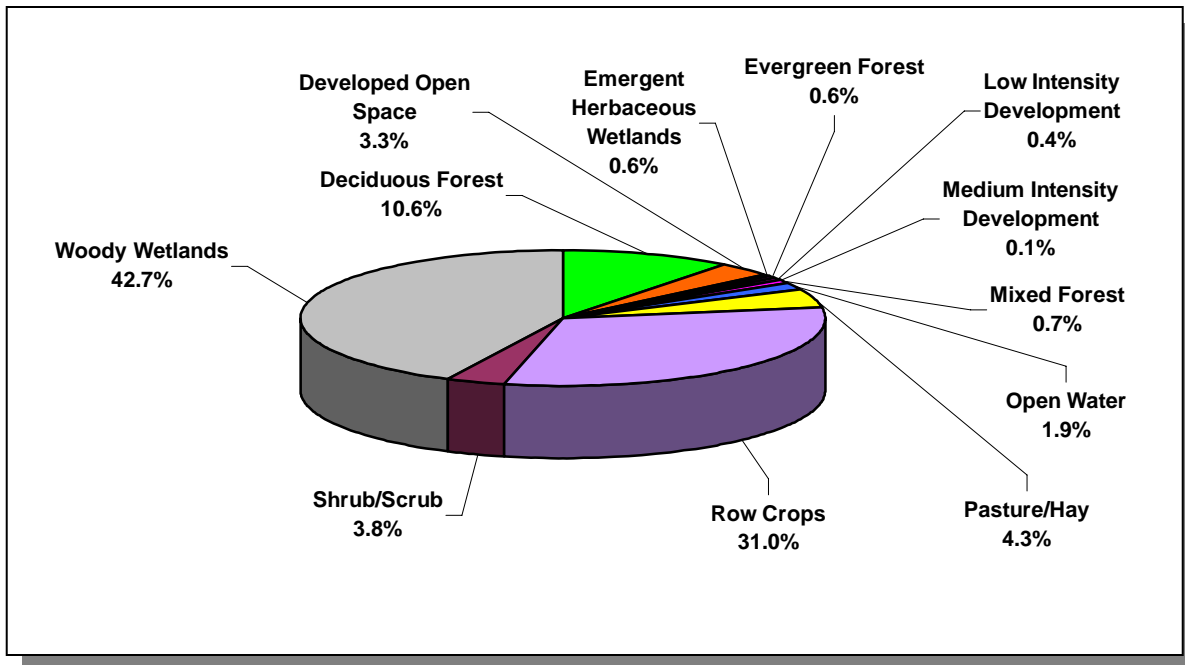


Figure 4-137. Land Use Distribution in Subwatershed 080102080404. More information is provided in Appendix IV.

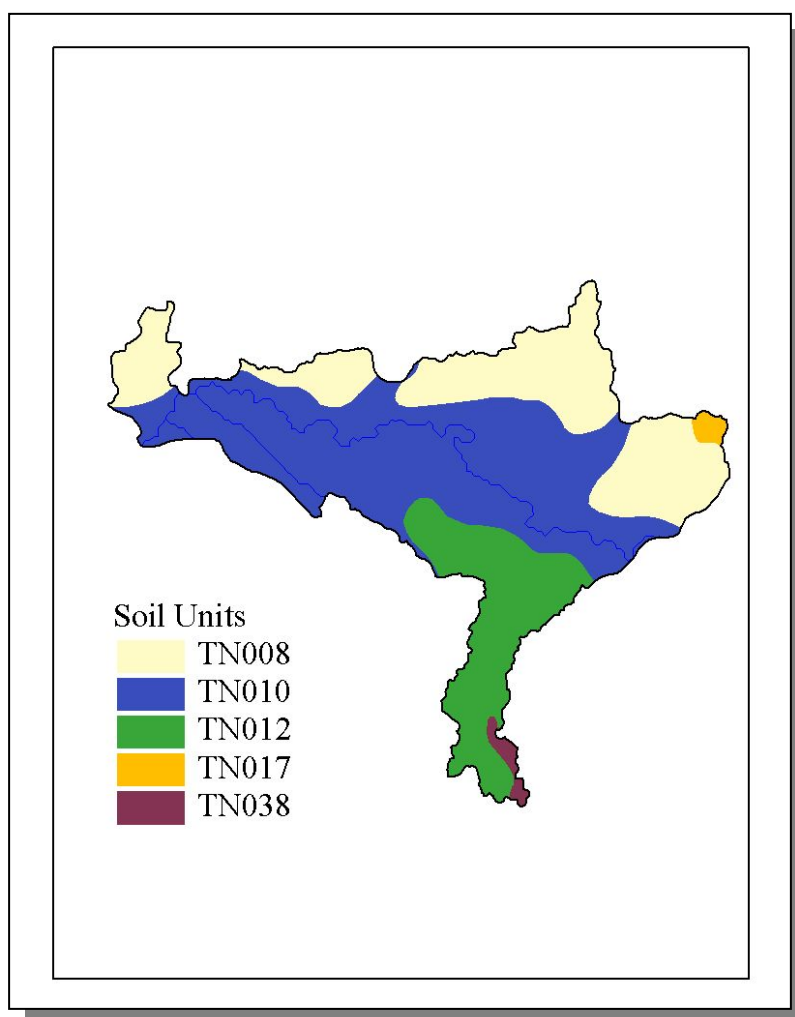


Figure 4-138. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080404.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN017	0.00	B	1.81	5.26	Silty Loam	0.45
TN038	9.00	C	1.65	5.20	Silty Loam	0.46

Table 4-124. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080404. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	0.75	176	186	212	20.5
Haywood	19,437	19,709	19,797	10.59	2,058	2,087	2,096	1.8
Madison	77,982	84,942	91,837	0.36	278	303	327	17.6
Total	120,796	129,353	139,739		2,512	2,576	2,631	4.9

Table 4-125. Population Estimates in Subwatershed 080102080404.

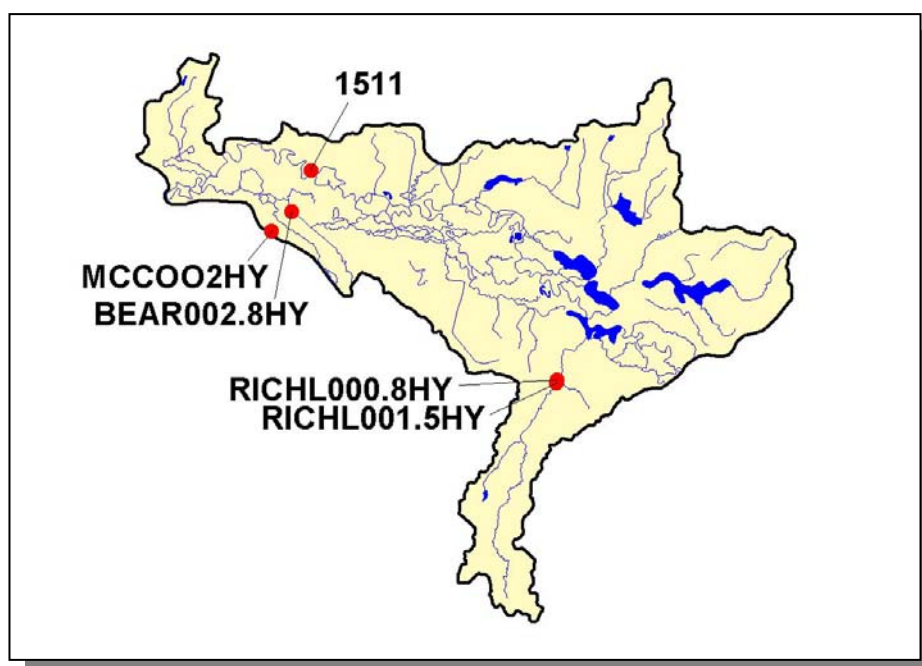


Figure 4-139. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080404. More information, including site names and locations, is provided in Appendix IV.

4.2.D.iv.a. Point Source Contributions.

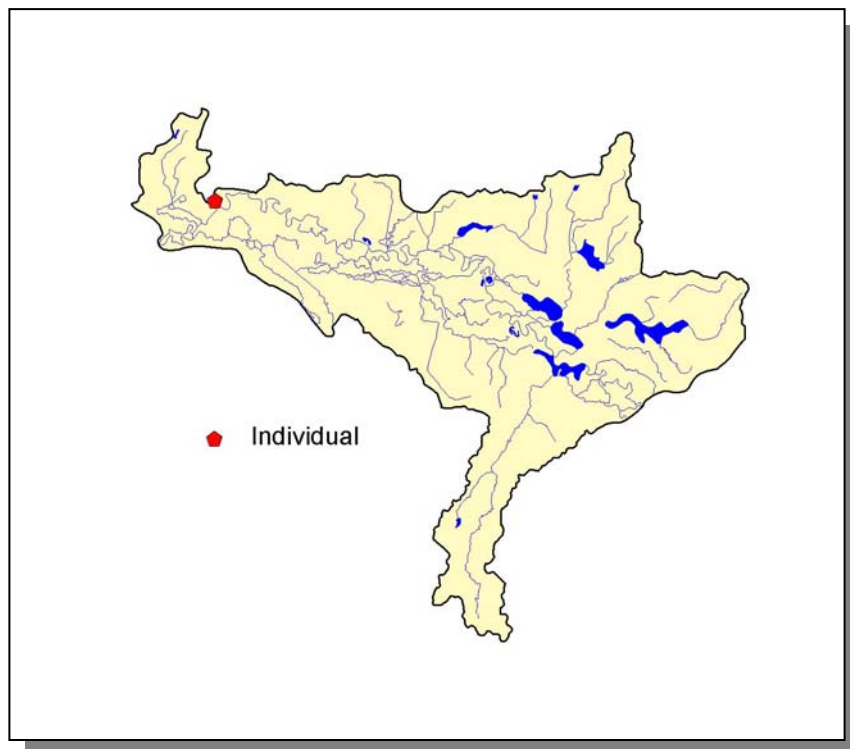


Figure 4-140. Location of Permits Issued in Subwatershed 080102080404. More information, including the names of facilities, is provided in Appendix IV.

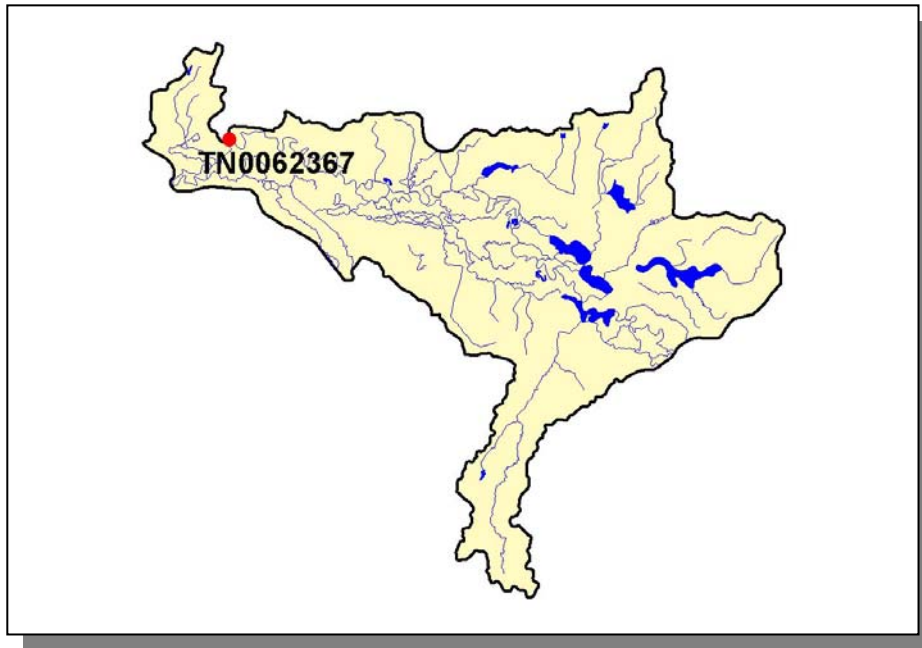


Figure 4-141. Location of Active NPDES Sites in Subwatershed 080102080404. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
356	671	<5	<5	215	<5

Table 4-126. Summary of Livestock Count Estimates in Subwatershed 080102080404. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Fayette	13,421	25,437	965	15	25,667	124
Hardeman	9,184	15,877	62	28	5,221	144
Haywood	3,442	6,220	29	237	1,740	12
Madison	0	12,437	0	476	10,210	0

Table 4-127. Summary of Livestock Count Estimates in Fayette, Hardeman, Haywood, and Madison Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.1	3.3
Hardeman	247.1	247.1	5.0	18.6
Haywood	71.2	71.2	1.7	6.4
Madison	140.7	140.7	2.4	11.5

Table 4-128. Forest Acreage and Annual Removal Rates (1987-1994) in Fayette, Hardeman, Haywood, and Madison Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.73
Grass (Hayland)	3.35
Legumes, Grass (Hayland)	0.22
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.45
Corn (Row Crops)	8.01
Cotton (Row Crops)	13.54
Sorghum (Row Crops)	3.94
Soybeans (Row Crops)	7.60
Wheat (Close-Grown Cropland)	11.73
All Other Close-Grown Cropland	2.99
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	4.32
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	1.16
Conservation Reserve Program Lands	0.85
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.63

Table 4-129. Annual Estimated Total Soil Loss in Subwatershed 080102080404.

4.2.D.v. 080102080405 (Jeffers Creek).

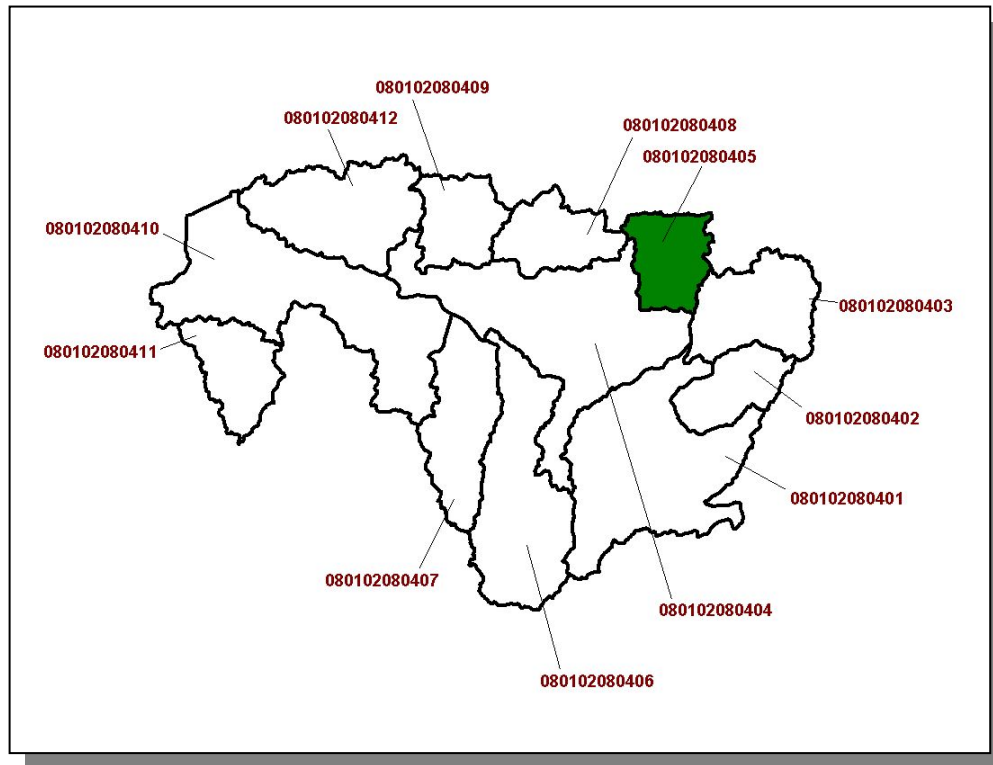


Figure 4-142. Location of Subwatershed 080102080405. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

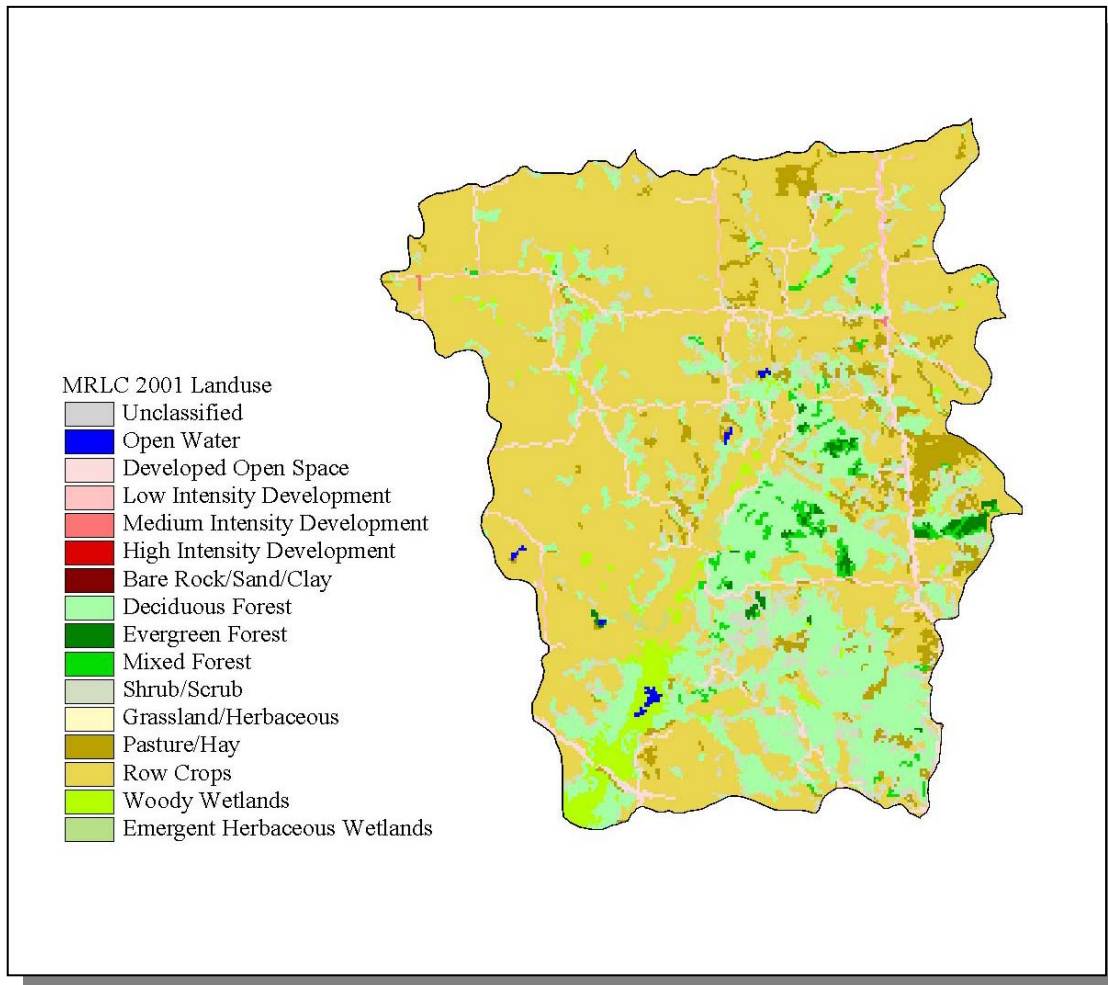


Figure 4-143. Illustration of Land Use Distribution in Subwatershed 080102080405.

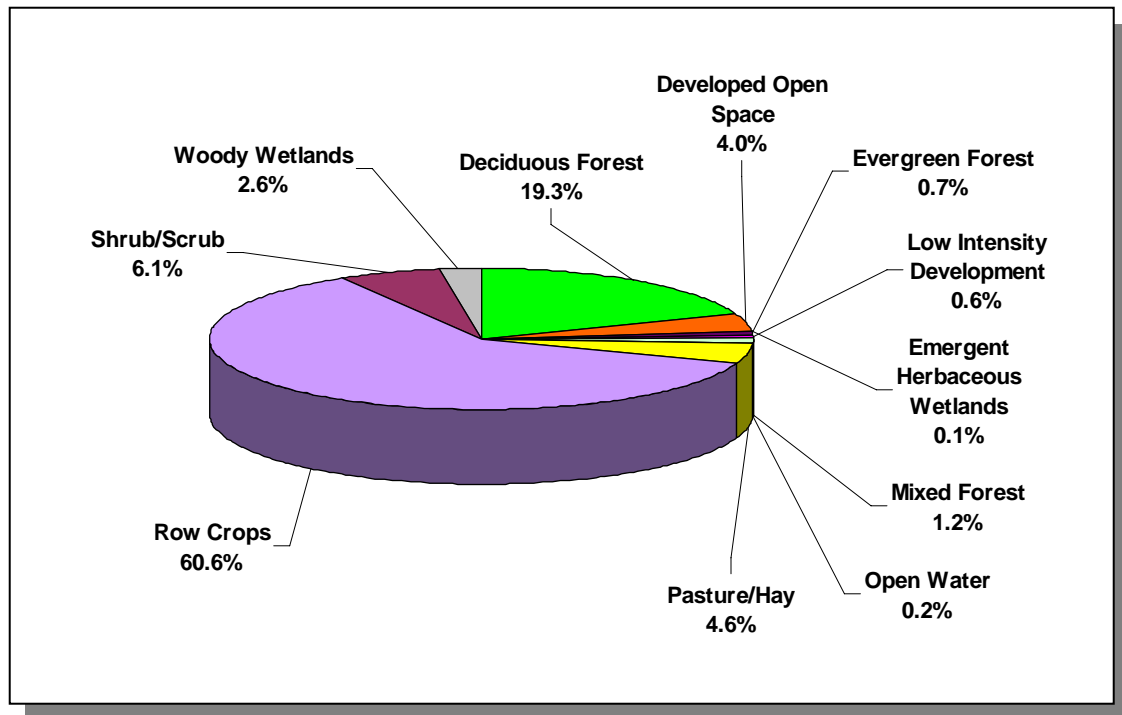


Figure 4-144. Land Use Distribution in Subwatershed 080102080405. More information is provided in Appendix IV.

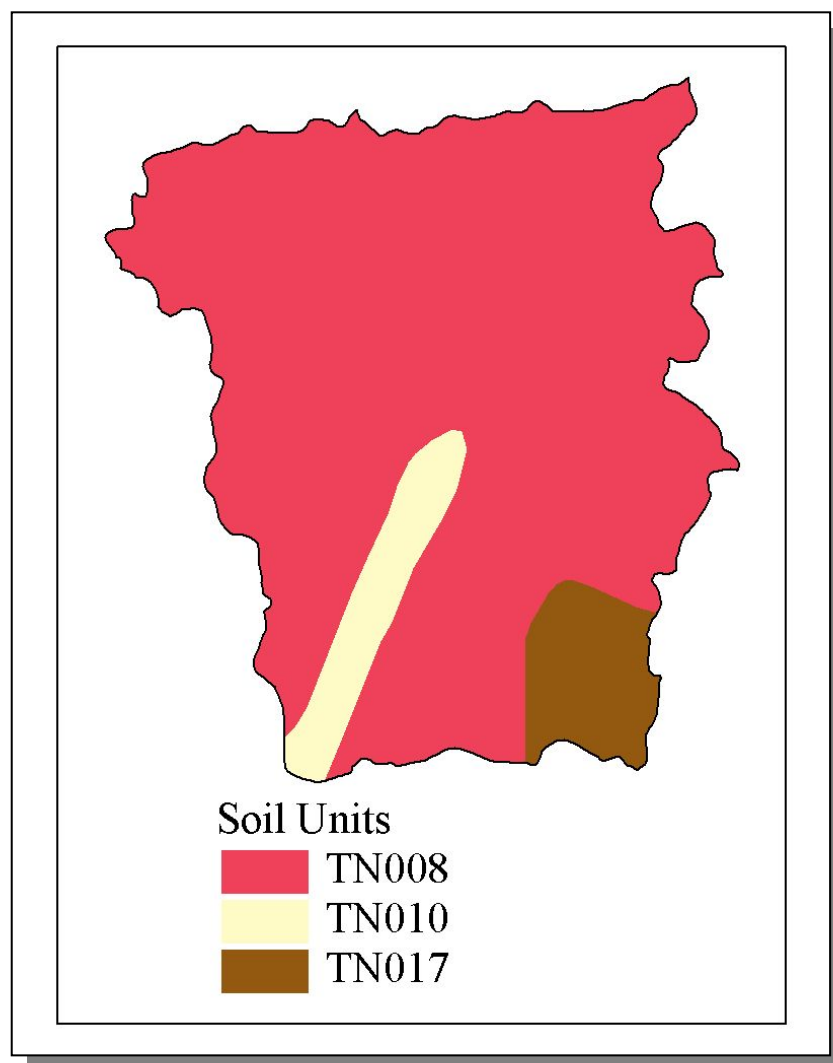


Figure 4-145. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080405.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN017	0.00	B	1.81	5.26	Silty Loam	0.45

Table 4-130. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080405. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	1.76	343	347	349	1.7
Madison	77,982	84,942	91,837	1.19	931	1,014	1,097	17.8
Total	97,419	104,651	111,634		1,274	1,361	1,446	13.5

Table 4-131. Population Estimates in Subwatershed 080102080405.

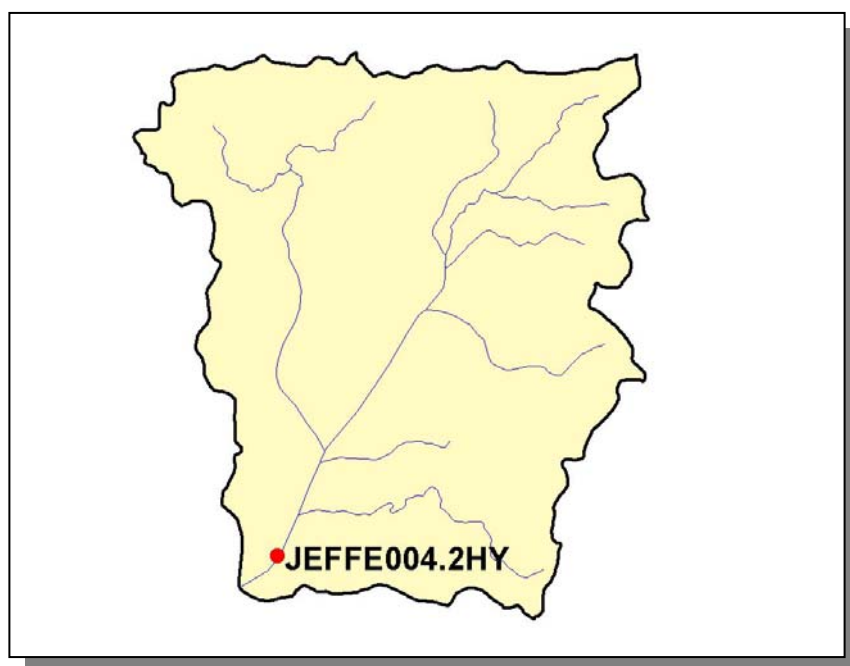


Figure 4-146. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080405. More information, including site names and locations, is provided in Appendix IV.

4.2.D.v.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS		
Beef Cow	Cattle	Hogs
54	249	152

Table 4-132. Summary of Livestock Count Estimates in Subwatershed 080102080405.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12
Madison	0	12,437	0	476	10,210	0

Table 4-133. Summary of Livestock Count Estimates in Haywood and Madison Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Haywood	71.2	71.2	1.7	6.4
Madison	140.7	140.7	2.4	11.5

Table 4-134. Forest Acreage and Annual Removal Rates (1987-1994) in Haywood and Madison Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.58
Grass (Hayland)	2.56
Grass, Forbs, Legumes (Mixed Pasture)	1.55
Corn (Row Crops)	10.50
Cotton (Row Crops)	12.69
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	7.74
Wheat (Close-Grown Cropland)	3.53
All Other Close-Grown Cropland	2.00
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	5.69
Other Cropland not Planted	1.42
Conservation Reserve Program Lands	0.73
Other Land in Farms	0.13
Farmsteads and Ranch Headquarters	0.55

Table 4-135. Annual Estimated Total Soil Loss in Subwatershed 080102080405.

4.2.D.vi. 080102080406 (Bear Creek).

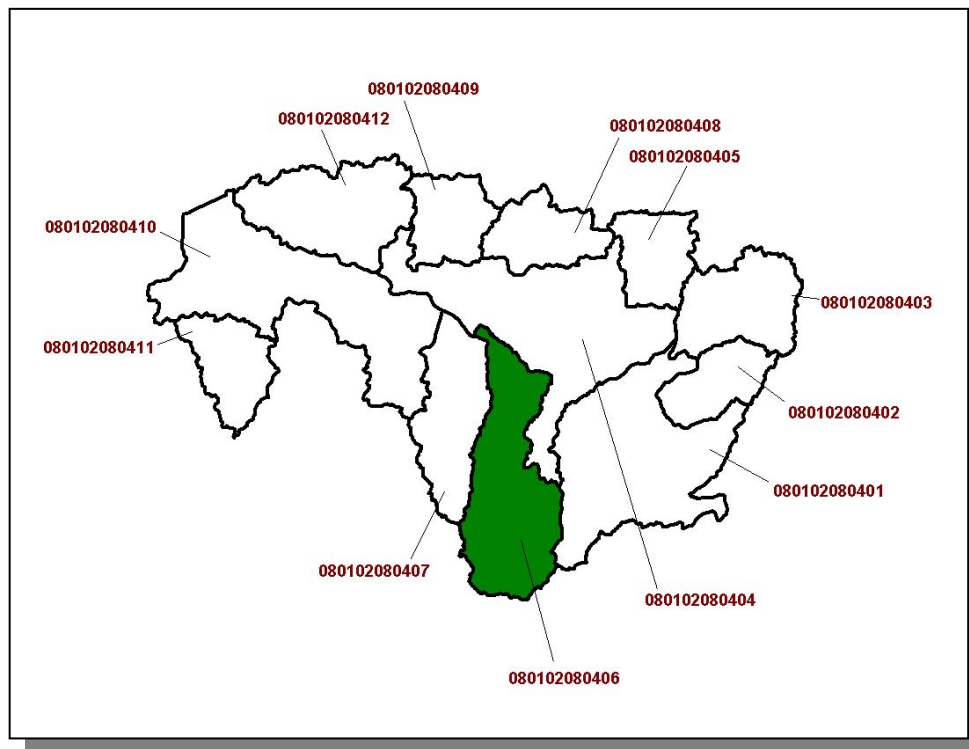


Figure 4-147. Location of Subwatershed 080102080406. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

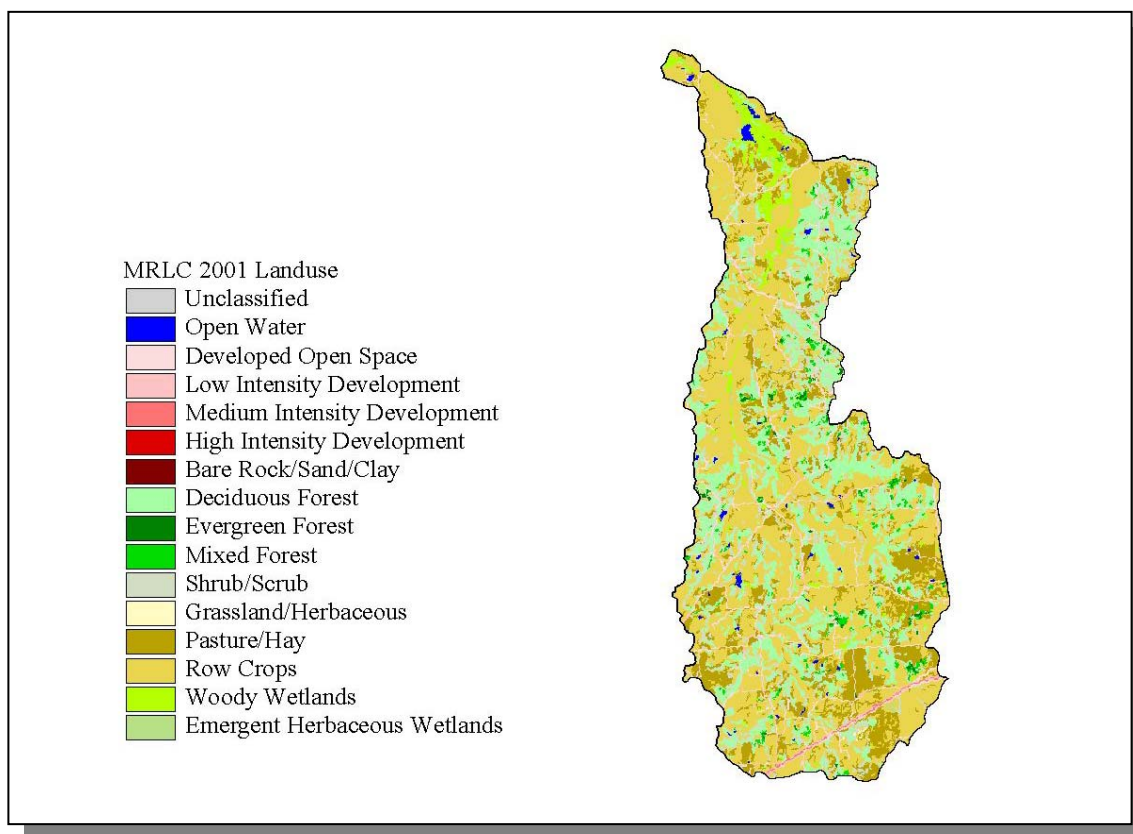


Figure 4-148. Illustration of Land Use Distribution in Subwatershed 080102080406.

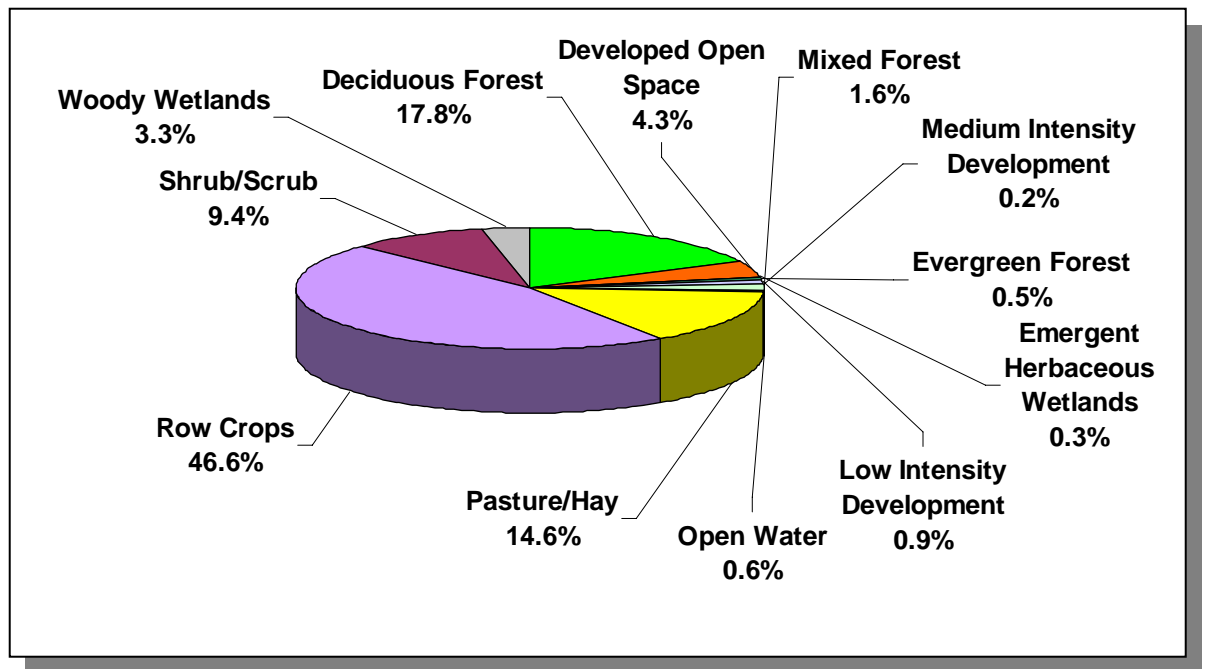


Figure 4-149. Land Use Distribution in Subwatershed 080102080406. More information is provided in Appendix IV.

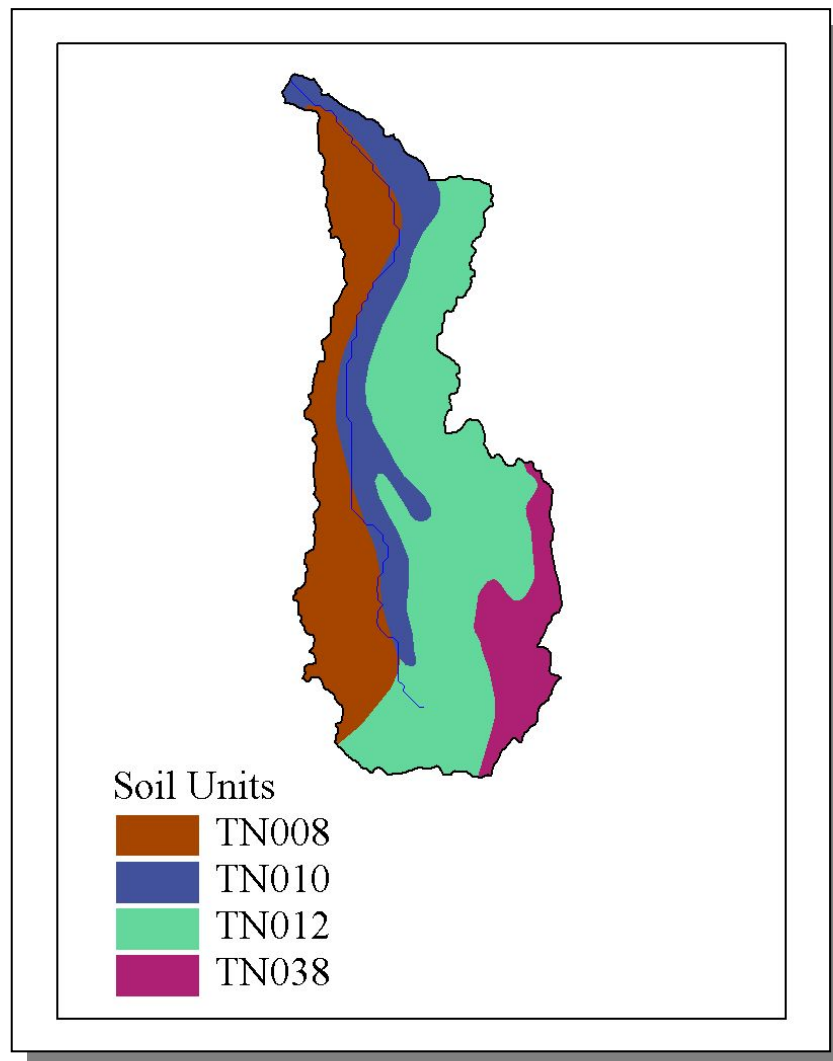


Figure 4-150. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080406.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN038	9.00	C	1.65	5.20	Silty Loam	0.46

Table 4-136. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080406. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Fayette	25,559	29,412	28,806	2.78	710	817	800	12.7
Hardeman	23,377	24,702	28,105	1.66	388	410	467	20.4
Haywood	19,437	19,709	19,797	2.31	449	456	458	2.0
Total	68,373	73,823	76,708		1,547	1,683	1,725	11.5

Table 4-137. Population Estimates in Subwatershed 080102080406.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Whiteville	Hardeman	1,050	444	424	20	0

Table 4-138. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080406.

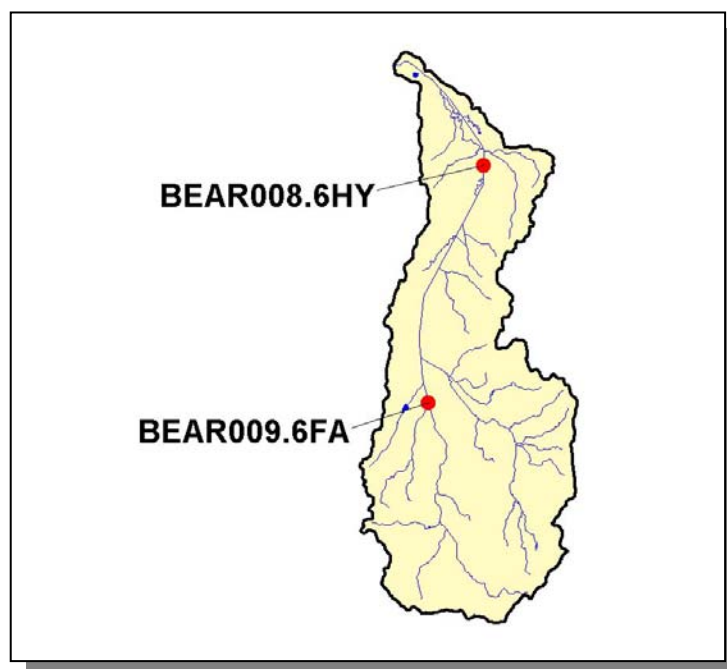


Figure 4-151. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080406. More information, including site names and locations, is provided in Appendix IV.

4.2.D.vi.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.vi.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
1,222	2,232	50	<5	1,530	13

Table 4-139. Summary of Livestock Count Estimates in Subwatershed 080102080406. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Fayette	13,421	25,437	965	15	25,667	124
Hardeman	9,184	15,877	62	28	5,221	144
Haywood	3,442	6,220	29	237	1,740	12

Table 4-140. Summary of Livestock Count Estimates in Fayette, Hardeman, and Haywood Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.1	3.3
Hardeman	247.1	247.1	5.0	18.6
Haywood	71.2	71.2	1.7	6.4

Table 4-141. Forest Acreage and Annual Removal Rates (1987-1994) in Fayette, Hardeman, and Haywood Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.71
Grass (Hayland)	1.33
Legumes, Grass (Hayland)	0.22
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.71
Corn (Row Crops)	13.98
Cotton (Row Crops)	14.36
Sorghum (Row Crops)	3.56
Soybeans (Row Crops)	9.83
Wheat (Close-Grown Cropland)	7.21
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.54
Other Vegetable and Truck Crops	4.20
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	2.02
Conservation Reserve Program Lands	0.54
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.49

Table 4-142. Annual Estimated Total Soil Loss in Subwatershed 080102080406.

4.2.D.vii. 080102080407 (Poplar Creek).

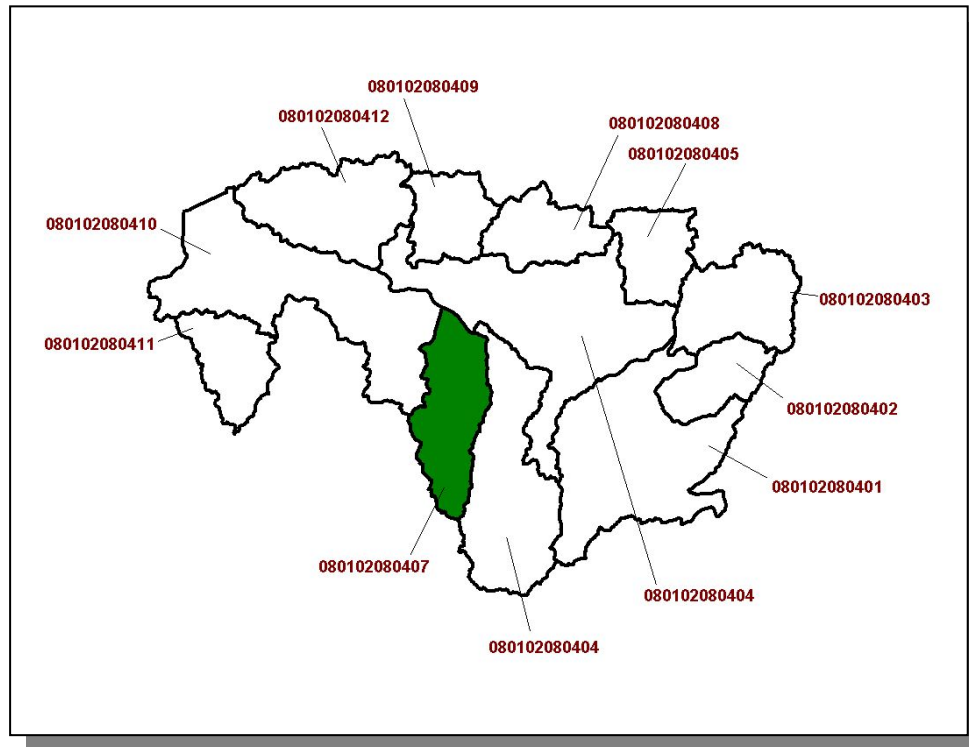


Figure 4-152. Location of Subwatershed 080102080407. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

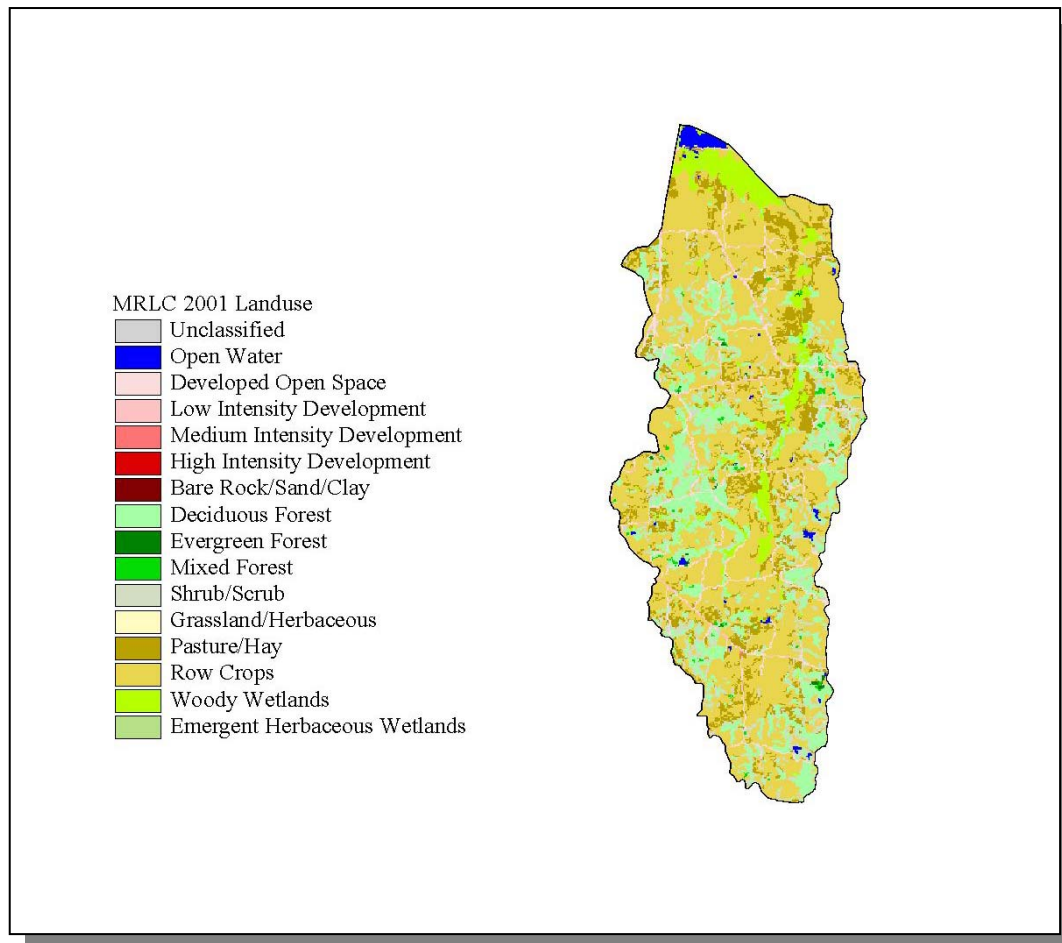


Figure 4-153. Illustration of Land Use Distribution in Subwatershed 080102080407.

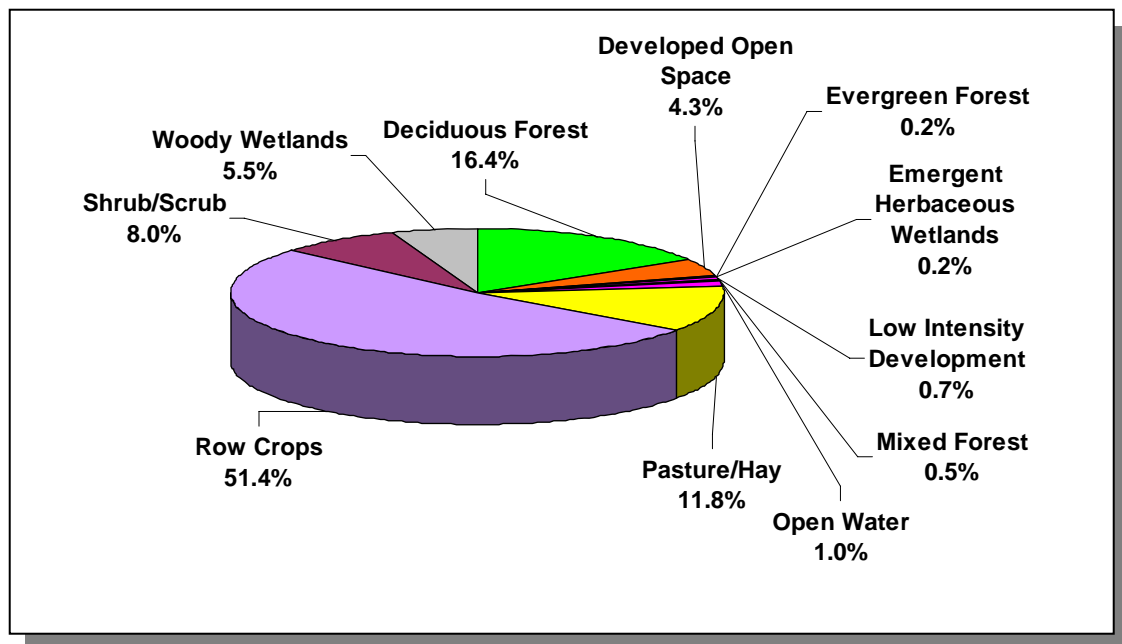


Figure 4-154. Land Use Distribution in Subwatershed 080102080407. More information is provided in Appendix IV.

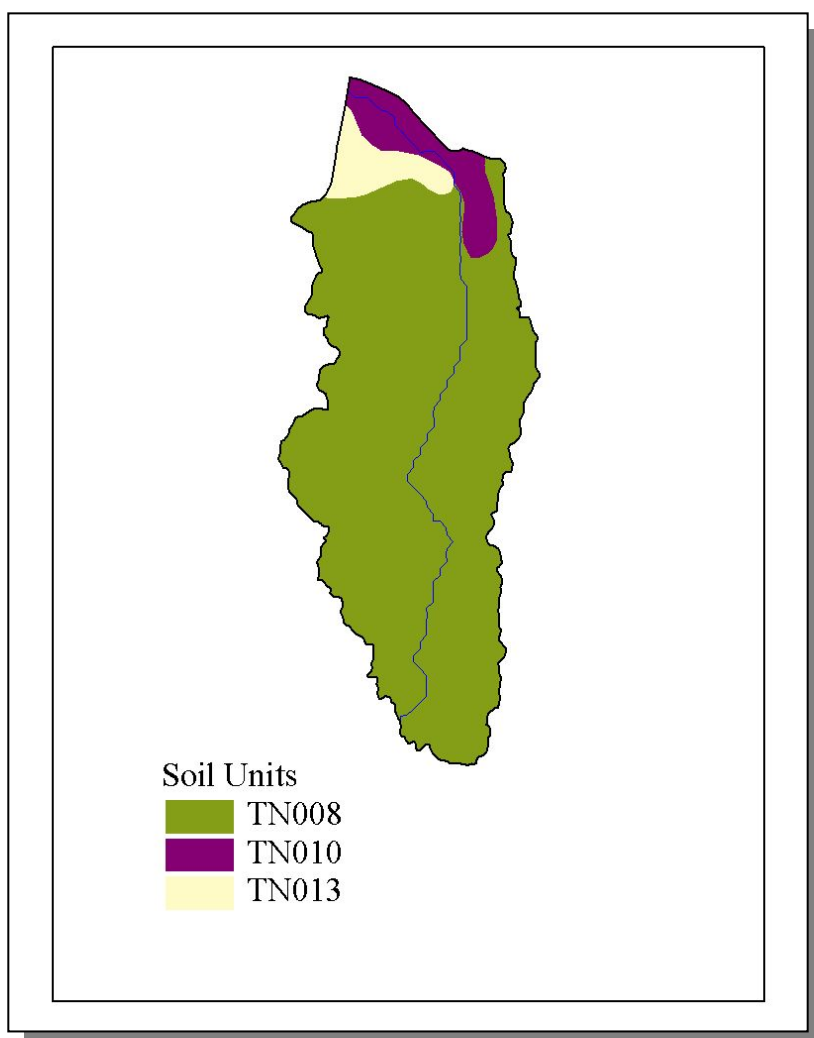


Figure 4-155. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080407.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46

Table 4-143. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080407. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Fayette	25,559	29,412	28,806	1.11	283	325	318	12.4
Haywood	19,437	19,709	19,797	3.5	681	691	694	1.9
Total	44,996	49,121	48,603		964	1,016	1,012	5.0

Table 4-144. Population Estimates in Subwatershed 080102080407.



Figure 4-156. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080407. More information, including site names and locations, is provided in Appendix IV.

4.2.D.vii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.vii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
396	734	16	<5	486	<5

Table 4-145. Summary of Livestock Count Estimates in Subwatershed 080102080407.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Fayette	13,421	25,437	965	15	25,667	124
Haywood	3,442	6,220	29	237	1,740	12

Table 4-146. Summary of Livestock Count Estimates in Fayette and Haywood Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.1	3.3
Haywood	71.2	71.2	1.7	6.4

Table 4-147. Forest Acreage and Annual Removal Rates (1987-1994) in Fayette and Haywood Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.62
Grass (Hayland)	2.72
Legumes, Grass (Hayland)	0.22
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.43
Corn (Row Crops)	10.99
Cotton (Row Crops)	11.50
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	7.90
Wheat (Close-Grown Cropland)	2.75
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.65
Other Vegetable and Truck Crops	4.20
Other Cropland not Planted	1.04
Conservation Reserve Program Lands	0.78
Other Land in Farms	1.16
Farmsteads and Ranch Headquarters	0.47

Table 4-148. Annual Estimated Total Soil Loss in Subwatershed 080102080407.

4.2.D.viii. 080102080408 (Carter Creek).

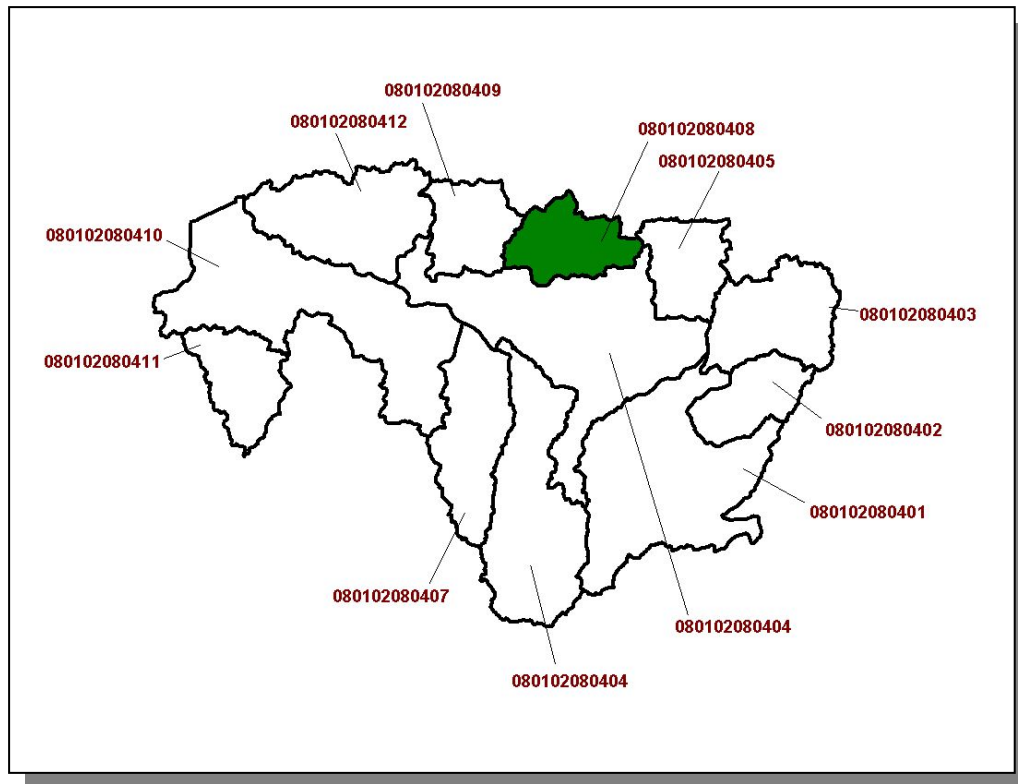


Figure 4-157. Location of Subwatershed 080102080408. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

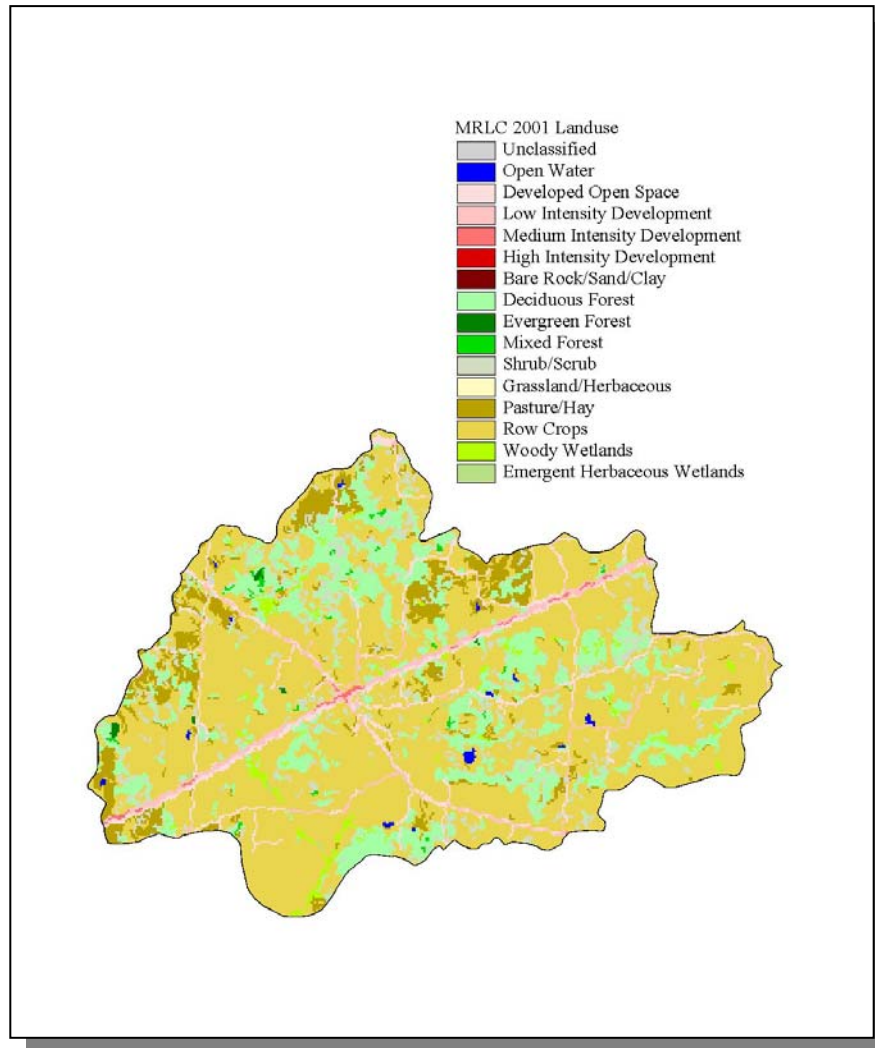


Figure 4-158. Illustration of Land Use Distribution in Subwatershed 080102080408.

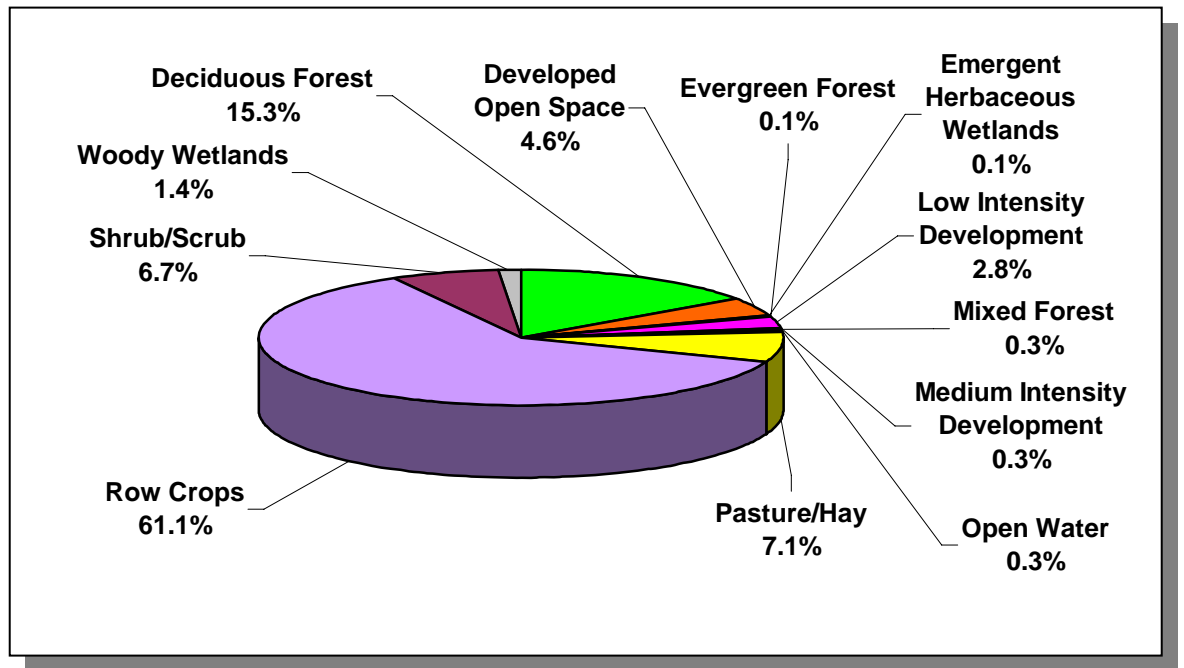


Figure 4-159. Land Use Distribution in Subwatershed 080102080408. More information is provided in Appendix IV.

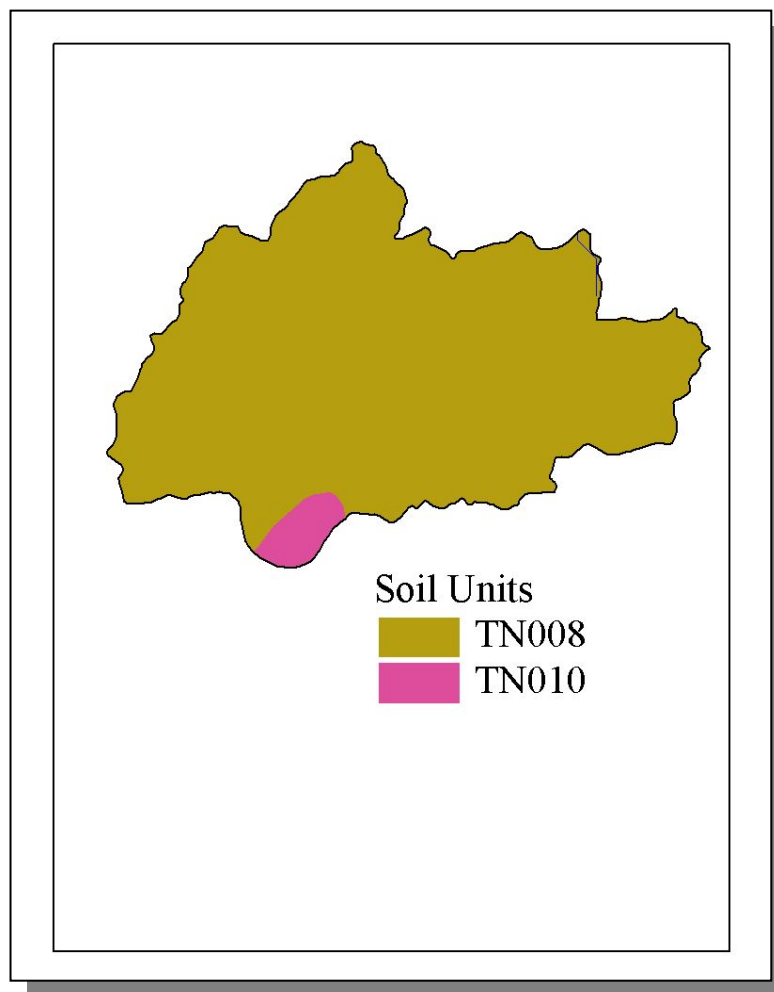


Figure 4-160. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080408.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44

Table 4-149. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080408. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	3.18	617	626	629	1.9

Table 4-150. Population Estimates in Subwatershed 080102080408.

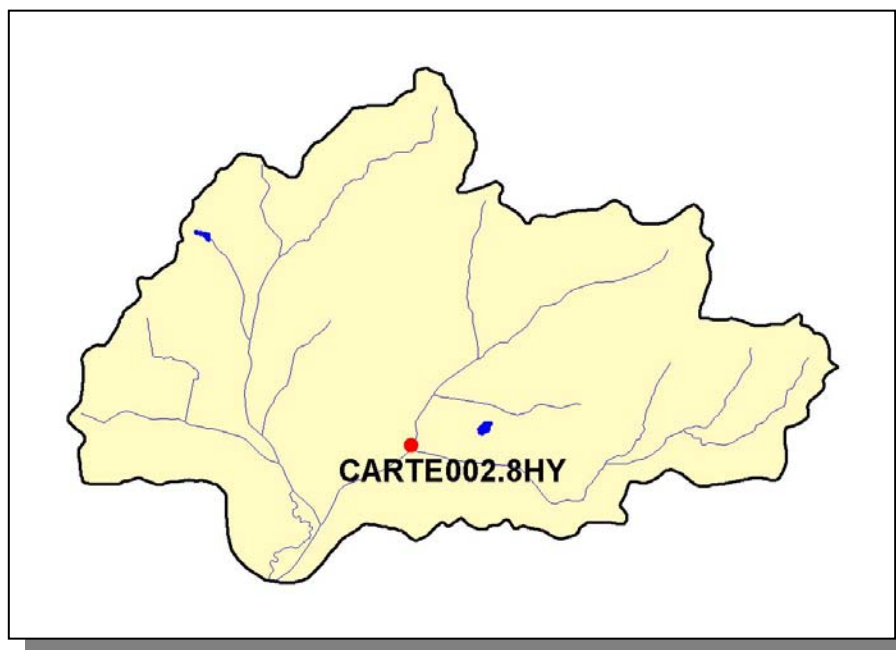


Figure 4-161. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080408. More information, including site names and locations, is provided in Appendix IV.

4.2.D.viii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.viii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Beef Cow	Cattle	Milk Cow	Hogs
137	247	<5	69

Table 4-151. Summary of Livestock Count Estimates in Subwatershed 080102080408. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12

Table 4-152. Summary of Livestock Count Estimates in Haywood County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Haywood	71.2	71.2	1.7	6.4

Table 4-153. Forest Acreage and Annual Removal Rates (1987-1994) in Haywood County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.70
Grass (Hayland)	3.69
Grass, Forbs, Legumes (Mixed Pasture)	0.30
Corn (Row Crops)	7.47
Cotton (Row Crops)	12.50
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	7.10
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	4.20
Other Cropland not Planted	0.85
Conservation Reserve Program Lands	0.91
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.61

Table 4-154. Annual Estimated Total Soil Loss in Subwatershed 080102080408.

4.2.D.ix. 080102080409 (Sugar Creek).

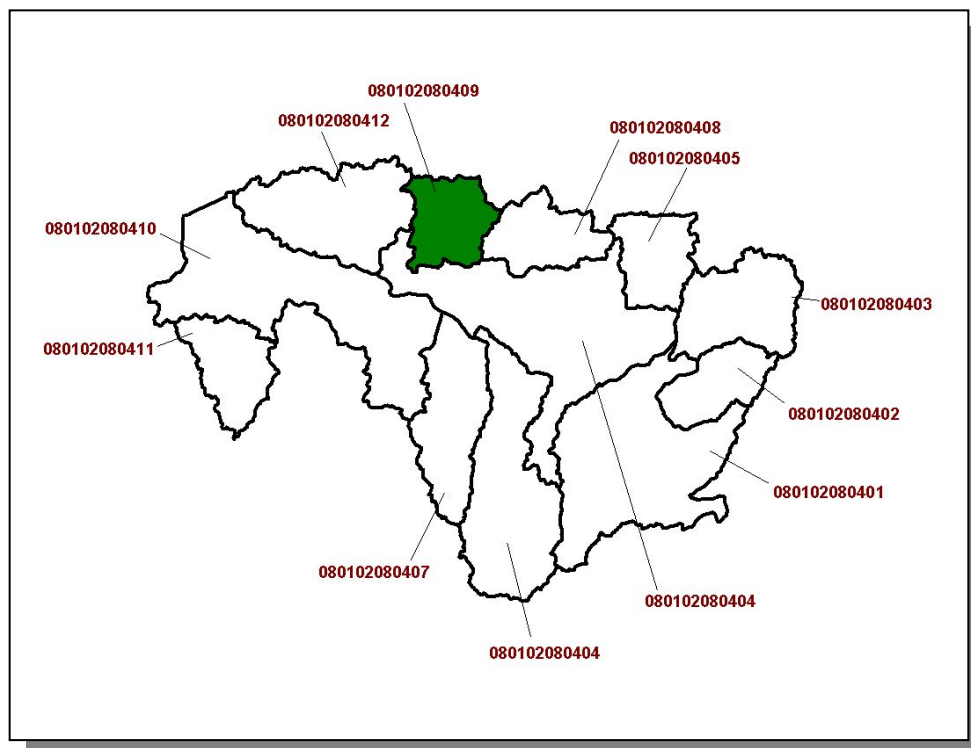


Figure 4-162. Location of Subwatershed 080102080409. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

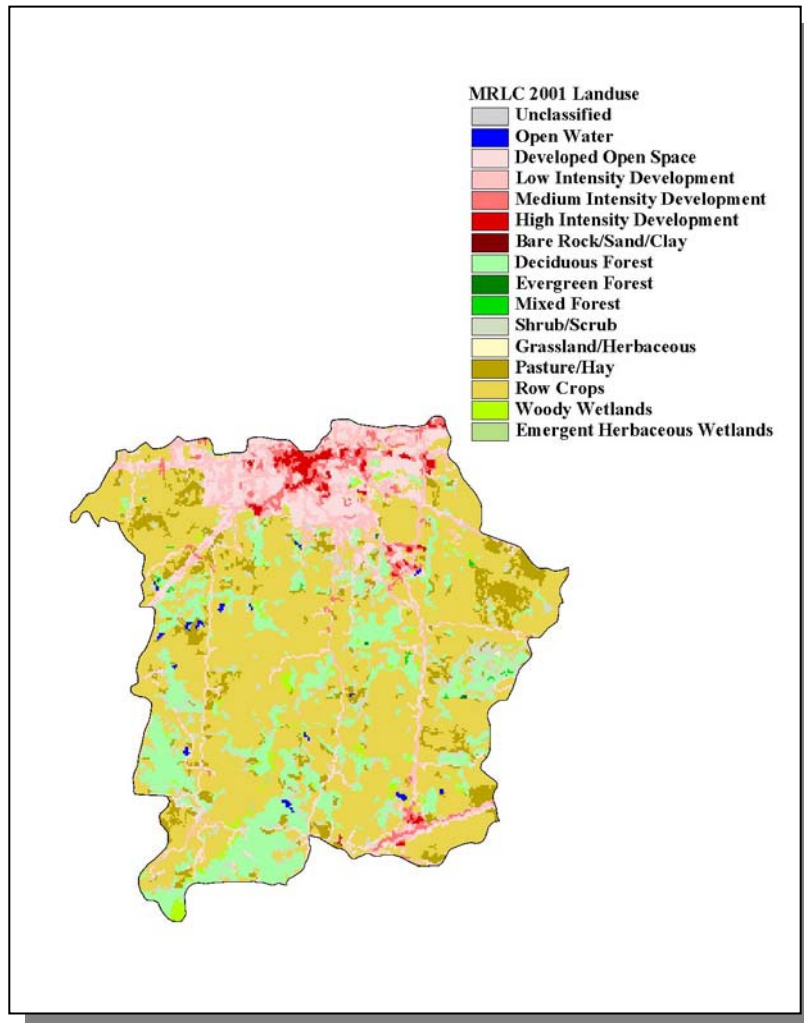


Figure 4-163. Illustration of Land Use Distribution in Subwatershed 080102080409.

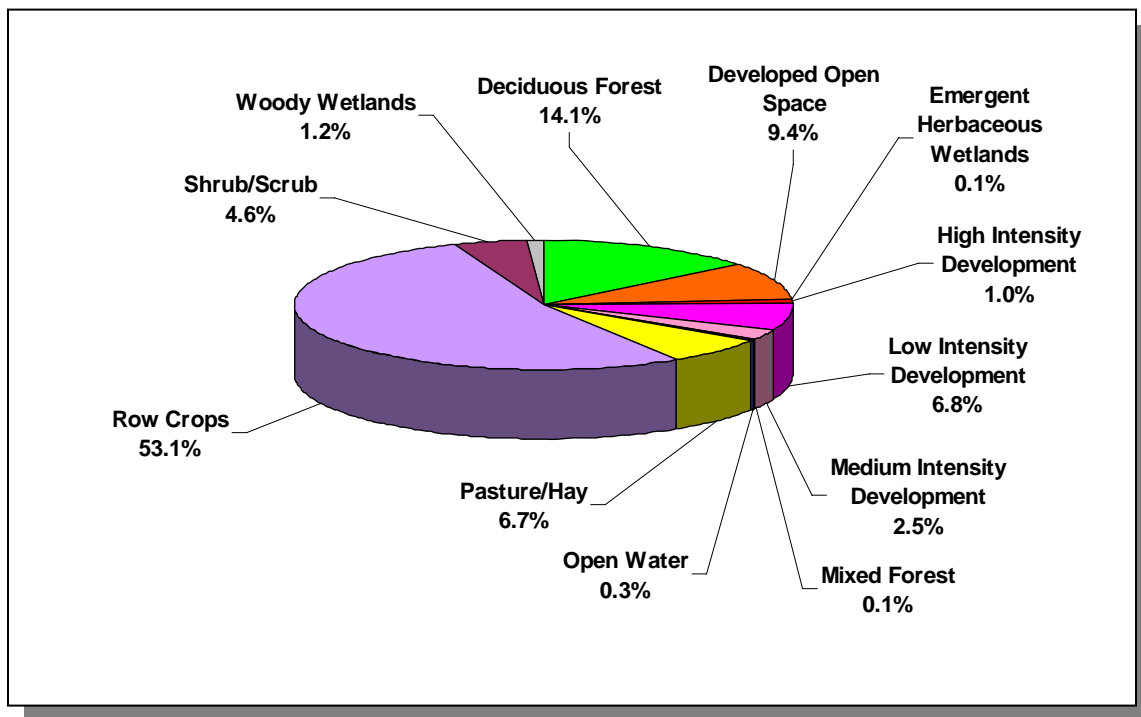


Figure 4-164. Land Use Distribution in Subwatershed 080102080409. More information is provided in Appendix IV.

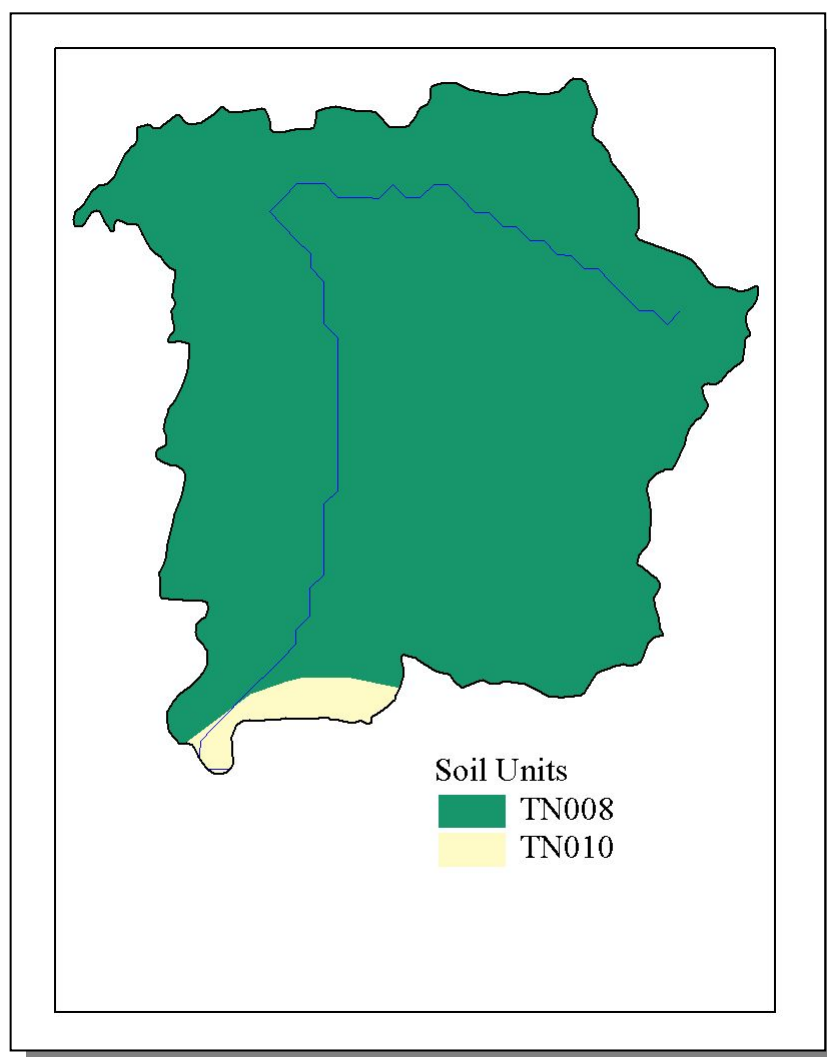


Figure 4-165. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080409.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44

Table 4-155. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080409. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	3.03	589	597	600	1.9

Table 4-156. Population Estimates in Subwatershed 080102080409.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Brownsville	Haywood	10,109	3,848	3,761	64	23

Table 4-157. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080409.



Figure 4-166. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080409. More information, including site names and locations, is provided in Appendix IV.

4.2.D.ix.a. Point Source Contributions.

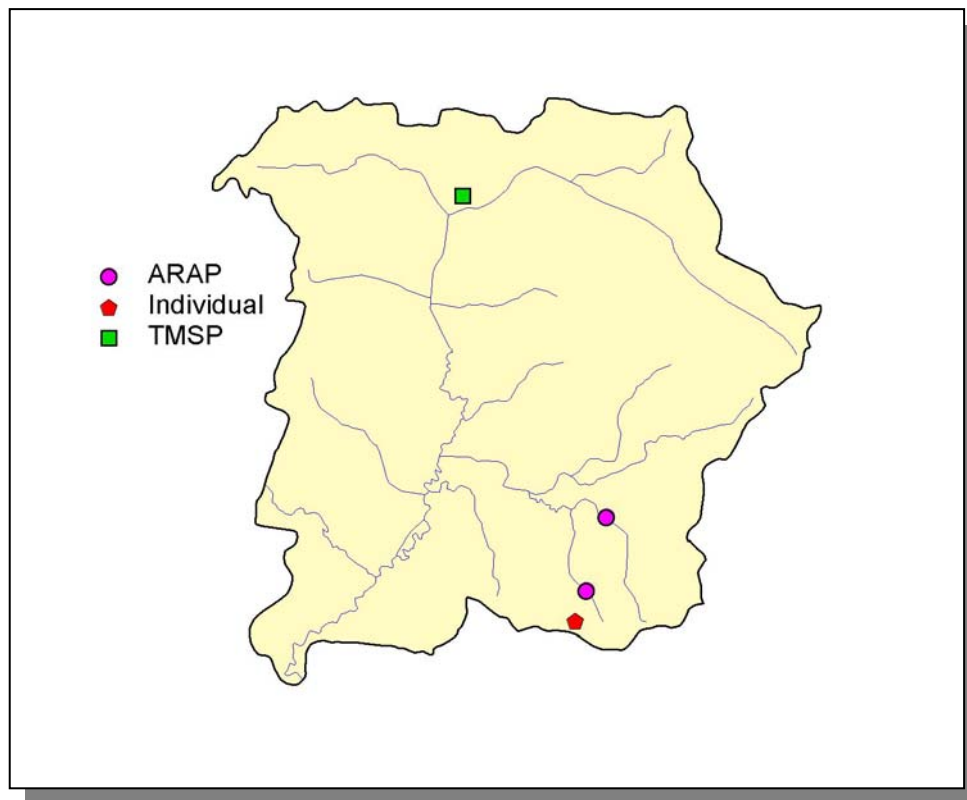


Figure 4-167. Location of Permits Issued in Subwatershed 080102080409. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-168. Location of Active NPDES Sites in Subwatershed 080102080409. More information, including the names of facilities, is provided in Appendix IV.

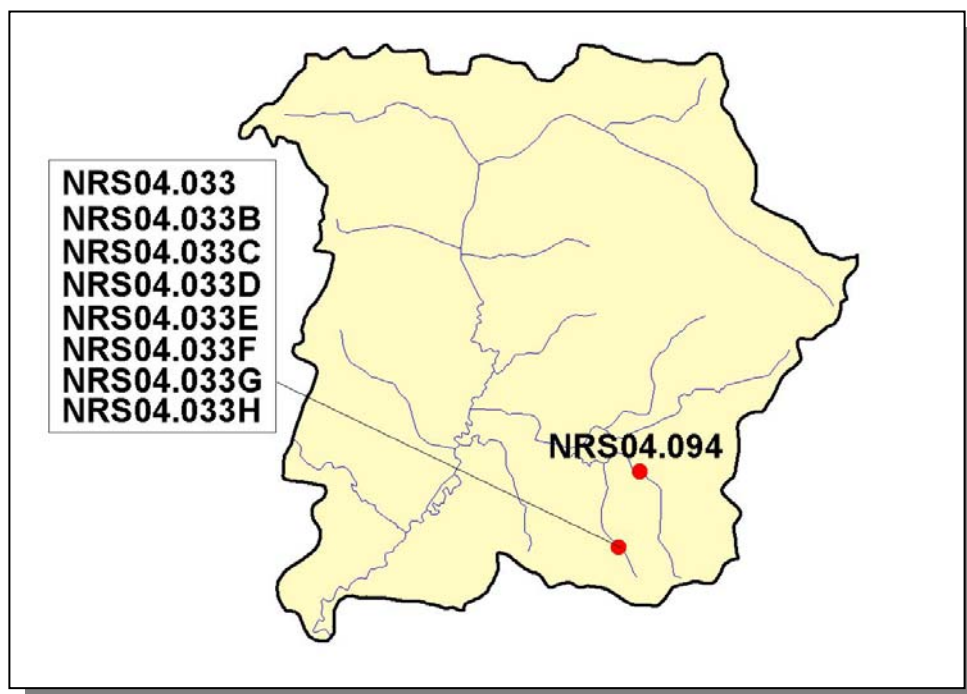


Figure 4-169. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080409. More information is provided in Appendix IV.



Figure 4-170. Location of TMSP Sites in Subwatershed 080102080409. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.ix.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Beef Cow	Cattle	Milk Cow	Hogs
130	235	<5	66

Table 4-158. Summary of Livestock Count Estimates in Subwatershed 080102080409. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12

Table 4-159. Summary of Livestock Count Estimates in Haywood County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Haywood	71.2	71.2	1.7	6.4

Table 4-160. Forest Acreage and Annual Removal Rates (1987-1994) in Haywood County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.70
Grass (Hayland)	3.69
Grass, Forbs, Legumes (Mixed Pasture)	0.30
Corn (Row Crops)	7.47
Cotton (Row Crops)	12.50
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	7.10
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	4.20
Other Cropland not Planted	0.85
Conservation Reserve Program Lands	0.91
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.61

Table 4-161. Annual Estimated Total Soil Loss in Subwatershed 080102080409.

4.2.D.x. 080102080410 (Hatchie River).

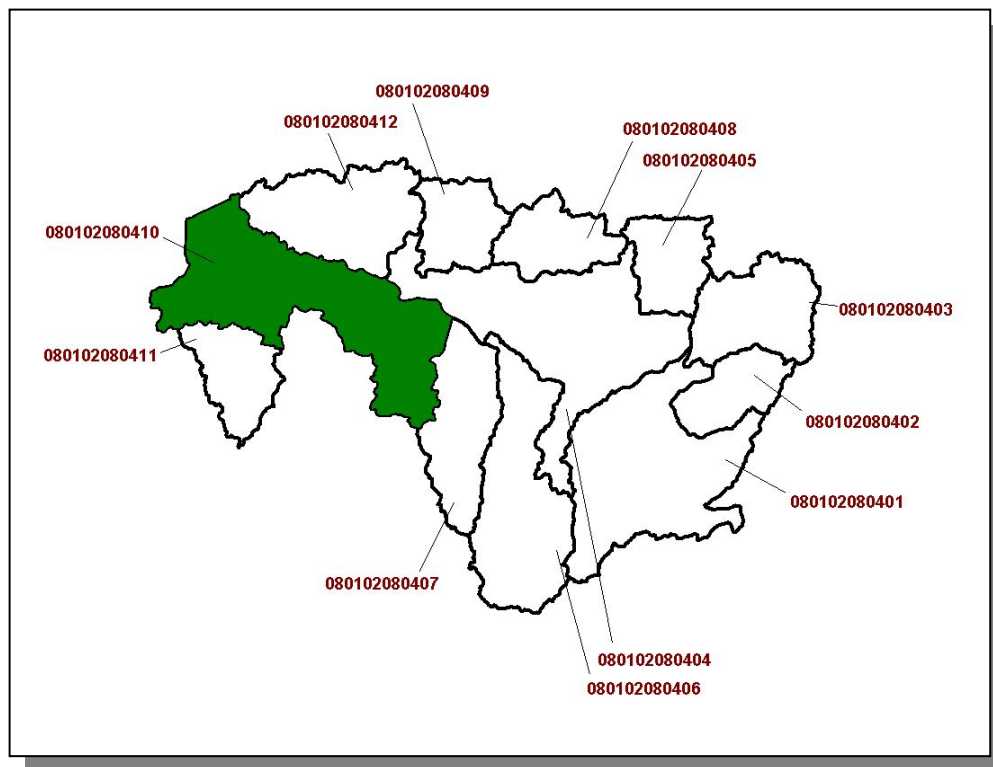


Figure 4-171. Location of Subwatershed 080102080410. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

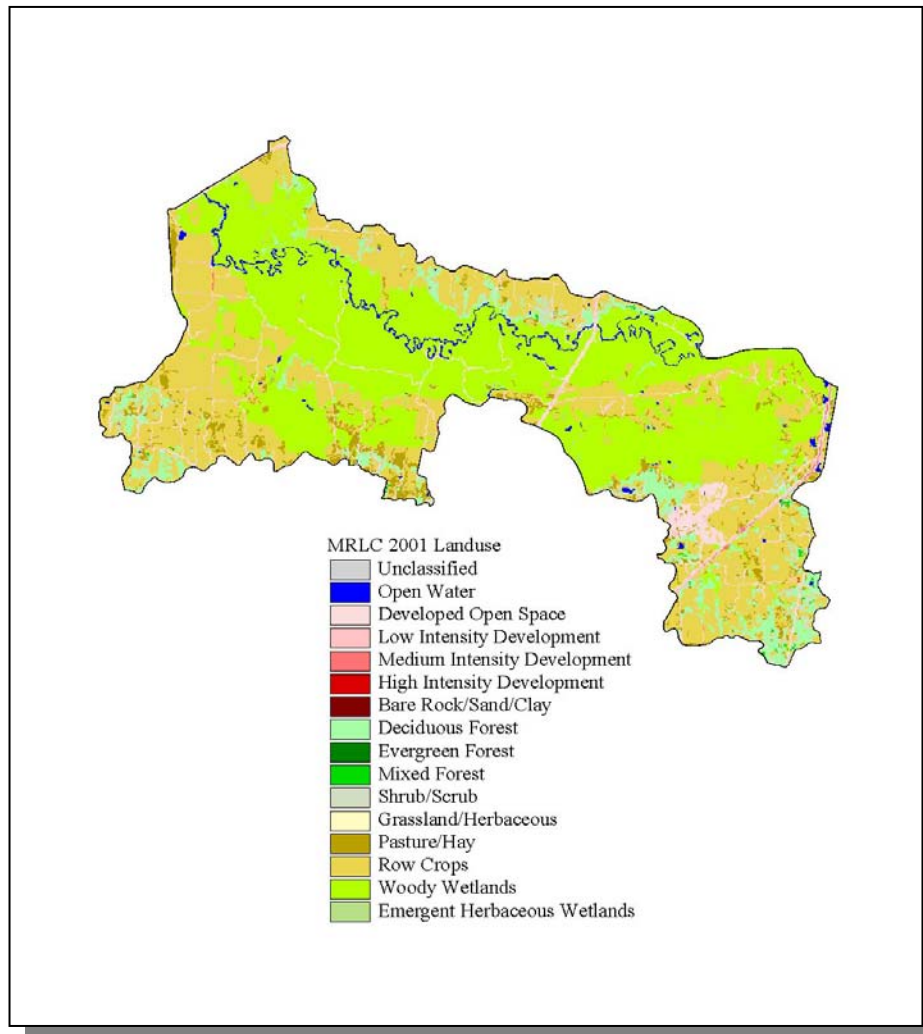


Figure 4-172. Illustration of Land Use Distribution in Subwatershed 080102080410.

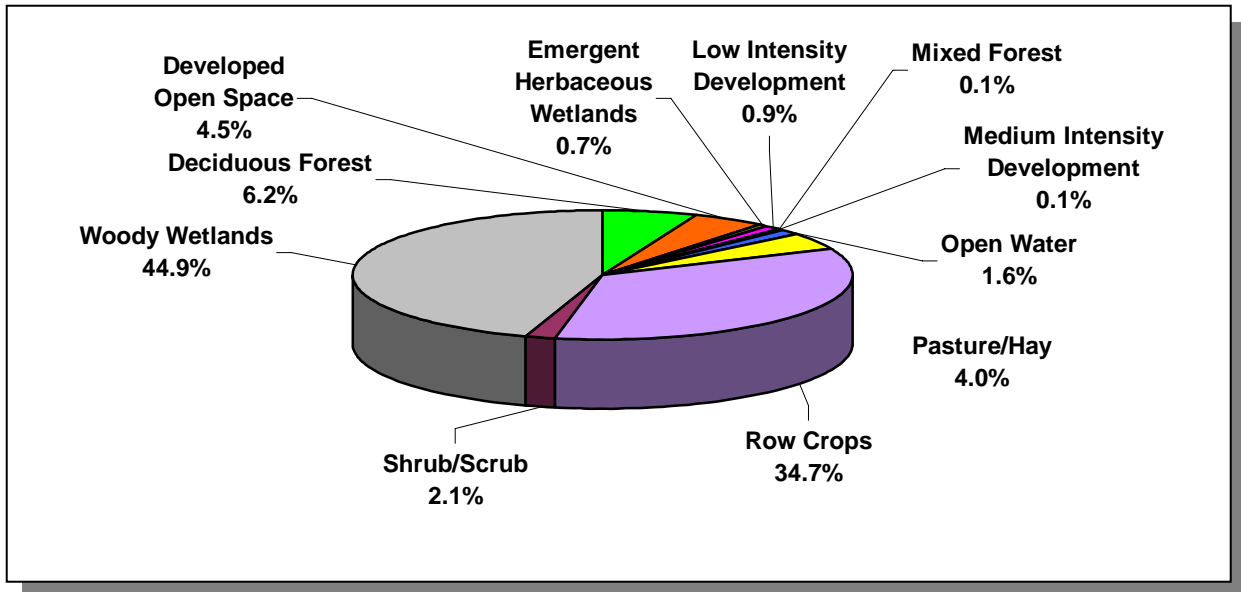


Figure 4-173. Land Use Distribution in Subwatershed 080102080410. More information is provided in Appendix IV.

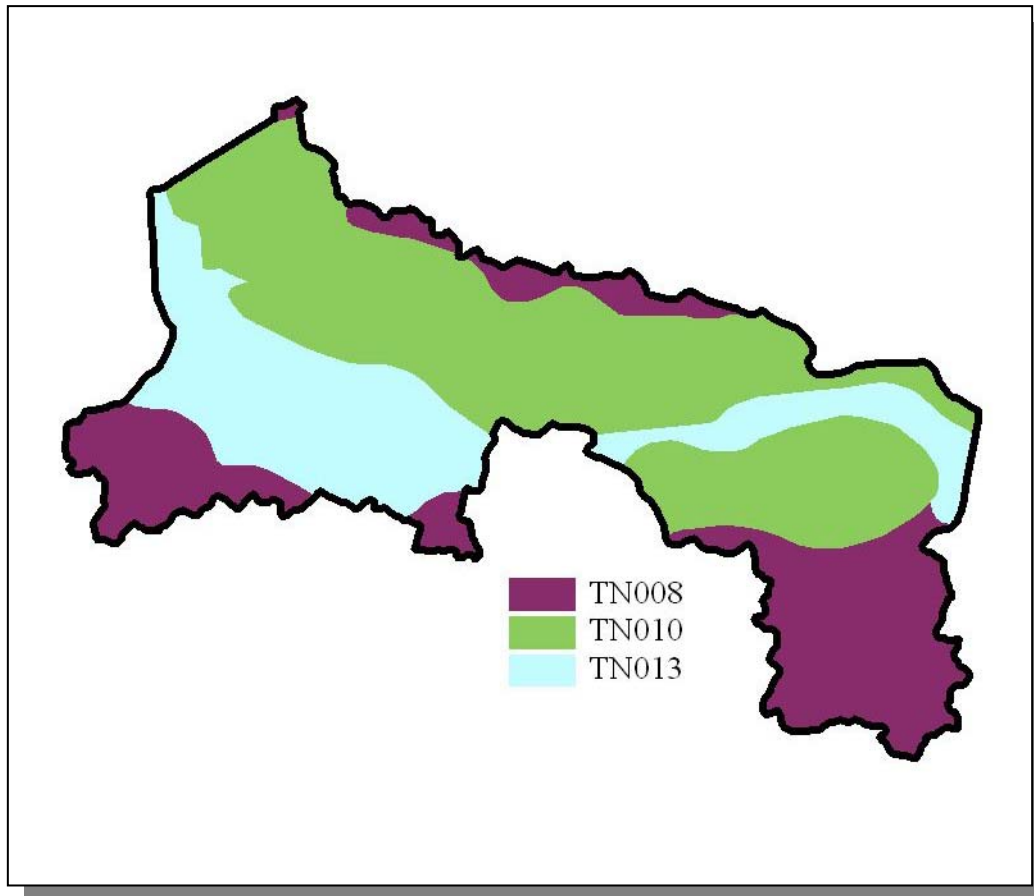


Figure 4-174. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080410.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46

Table 4-162. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080410. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,787	9.68	1,881	1,907	1,915	1.8
Tipton	37,568	45,986	51,271	2.41	905	1,108	1,235	36.5
Total	57,005	65,695	71,068		2,786	3,015	3,150	13.1

Table 4-163. Population Estimates in Subwatershed 080102080410.

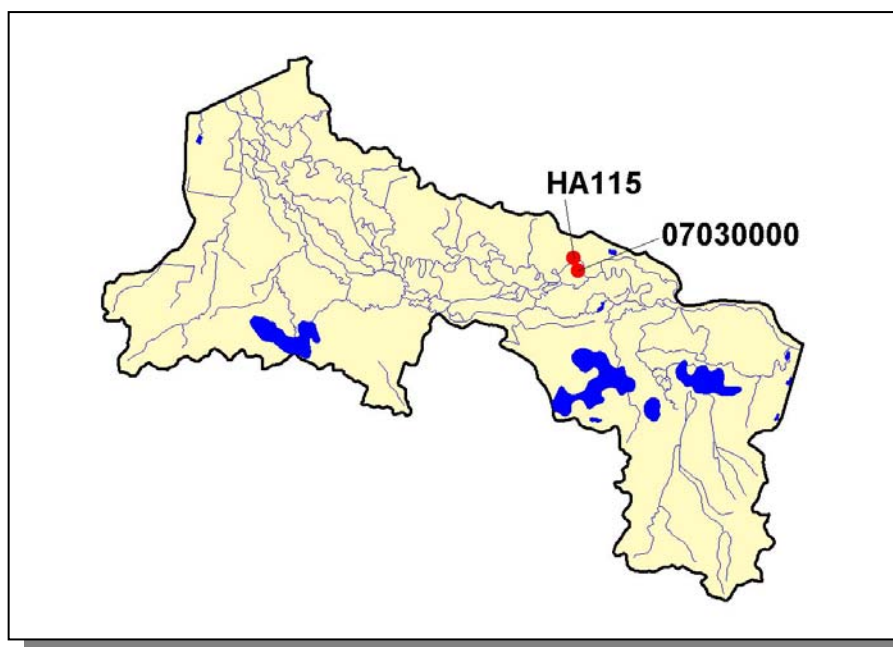


Figure 4-175. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080410. More information is provided in Appendix IV.

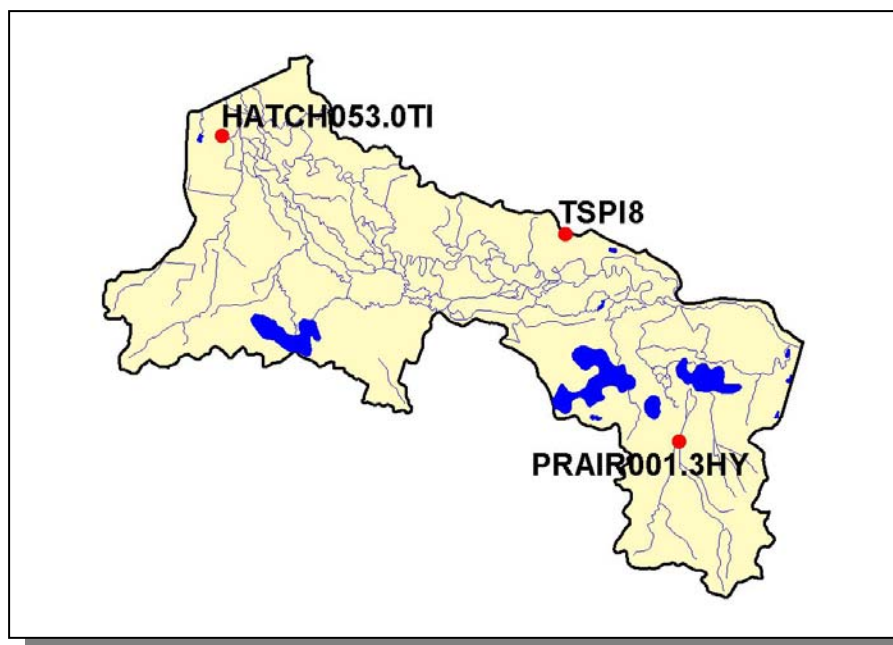


Figure 4-176. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080410. More information, including site names and locations, is provided in Appendix IV.

4.2.D.x.a. Point Source Contributions.

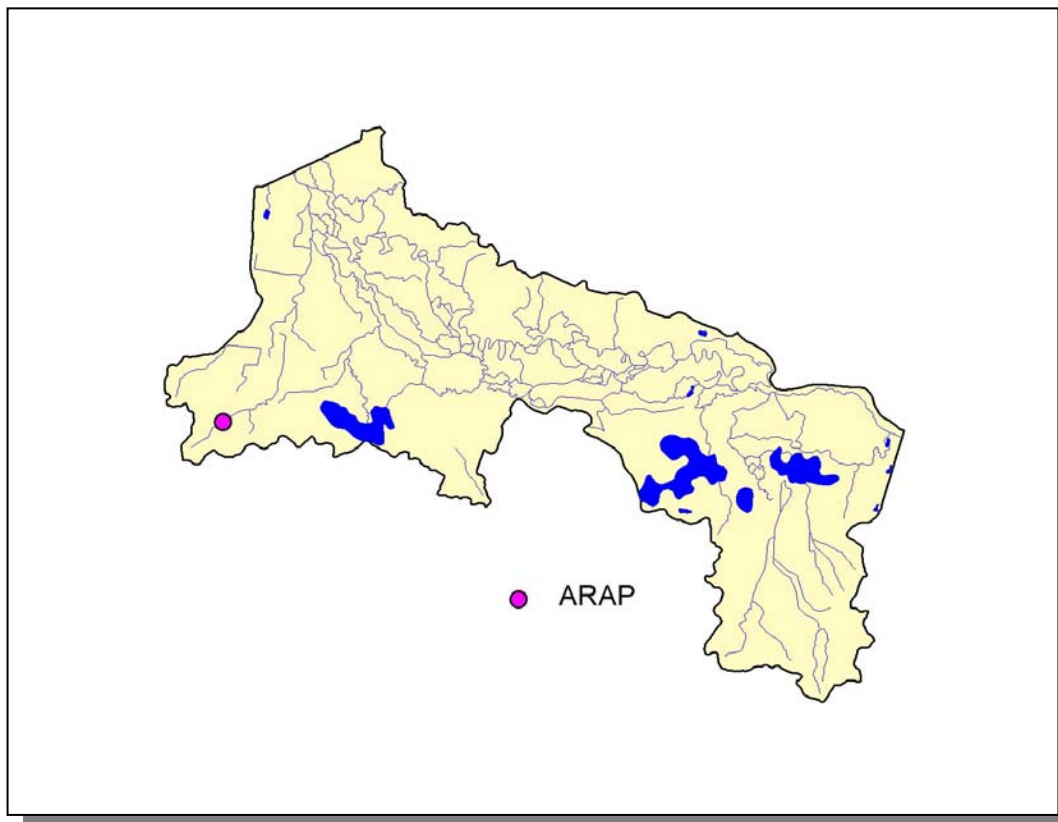


Figure 4-177. Location of Permits Issued in Subwatershed 0801020800410. More information, including the names of facilities, is provided in Appendix IV.

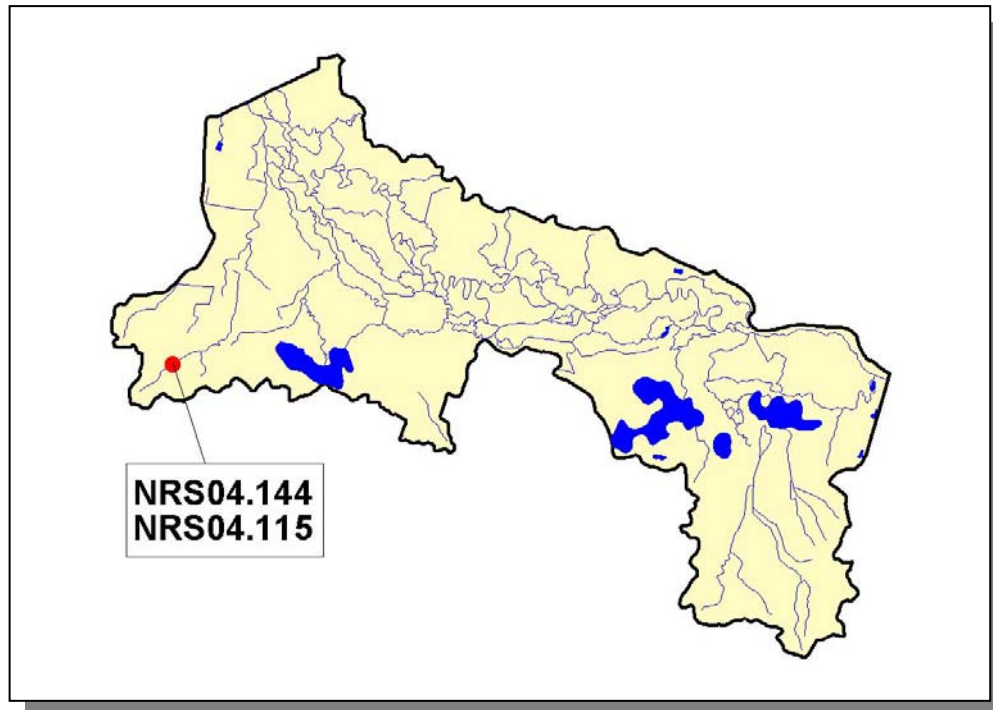


Figure 4-178. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080410. More information is provided in Appendix IV.

4.2.D.x.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
323	584	<5	<5	116	<5

Table 4-164. Summary of Livestock Count Estimates in Subwatershed 080102080410.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12
Tipton	5,422	9,796	14	334	251	86

Table 4-165. Summary of Livestock Count Estimates in Haywood and Tipton Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Haywood	71.2	71.2	1.7	6.4
Tipton	50.9	50.9	1.0	5.6

Table 4-166. Forest Acreage and Annual Removal Rates (1987-1994) in Haywood and Tipton Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.72
Grass (Hayland)	3.42
Legumes (Hayland)	0.54
Grass, Forbs, Legumes (Mixed Pasture)	0.42
Corn (Row Crops)	7.47
Cotton (Row Crops)	13.18
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	9.06
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	7.11
Other Cropland not Planted	0.75
Conservation Reserve Program Lands	0.93
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.62

Table 4-167. Annual Estimated Total Soil Loss in Subwatershed 080102080410.

4.2.D.xi. 080102080411 (Little Muddy Creek).

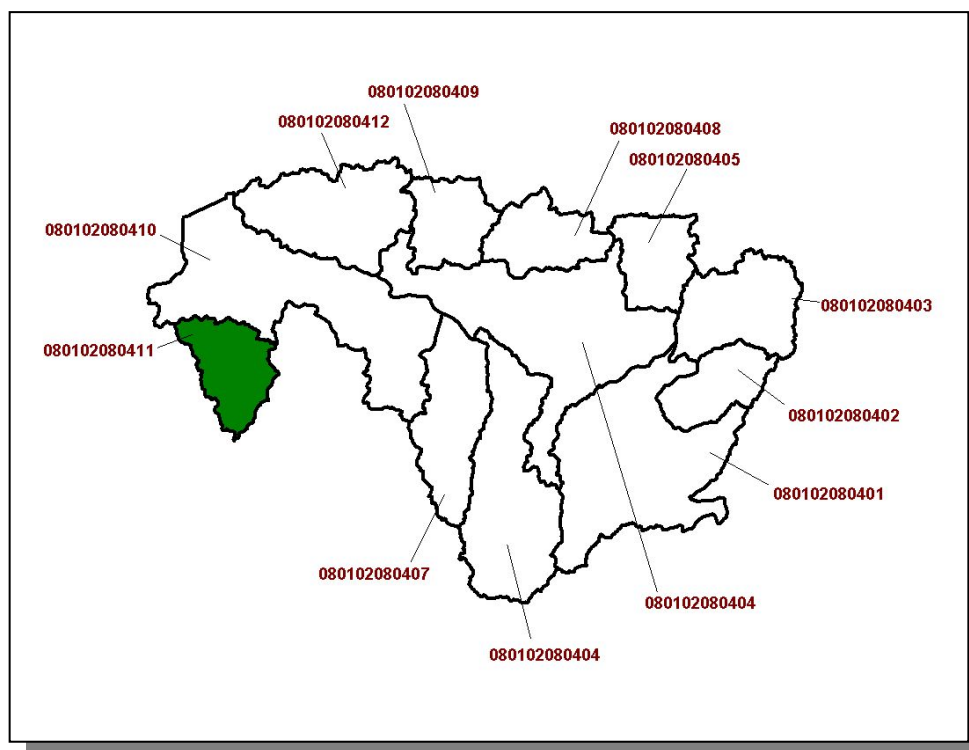


Figure 4-179. Location of Subwatershed 080102080411. All Hatchie HUC-12 subwatershed boundaries in Tennessee are shown for reference.

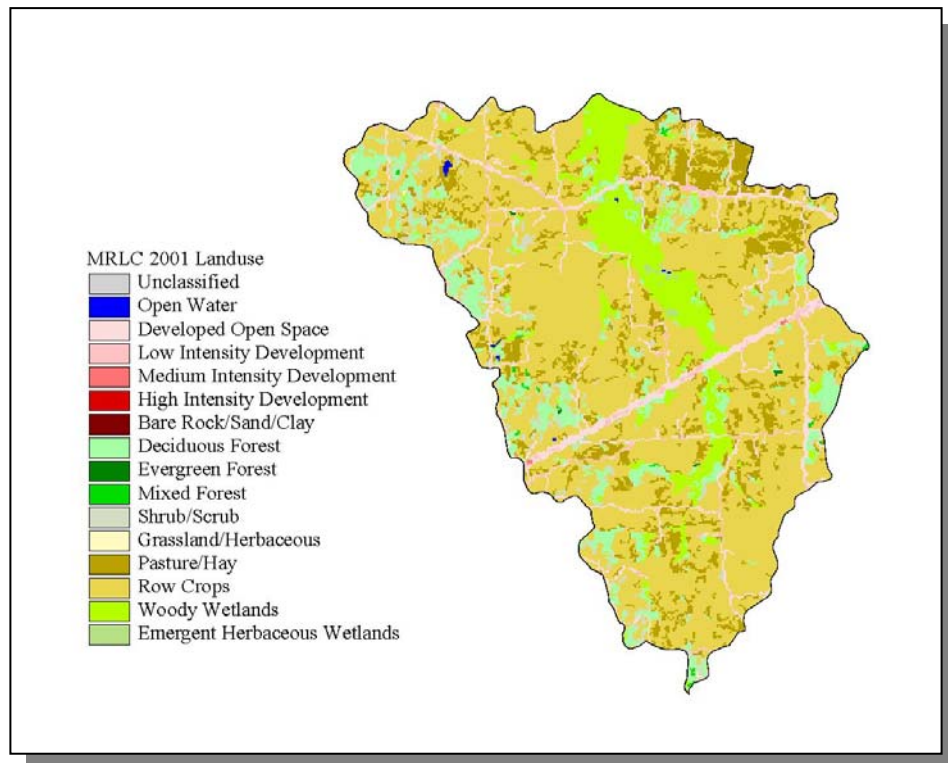


Figure 4-180. Illustration of Land Use Distribution in Subwatershed 080102080411.

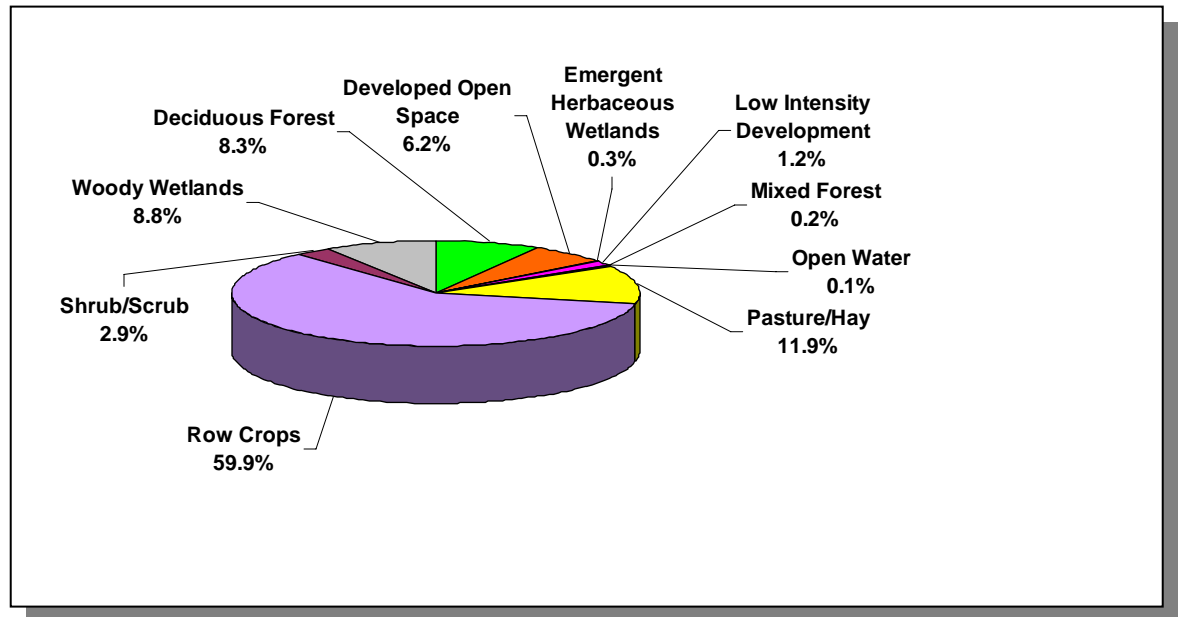


Figure 4-181. Land Use Distribution in Subwatershed 080102080411. More information is provided in Appendix IV.

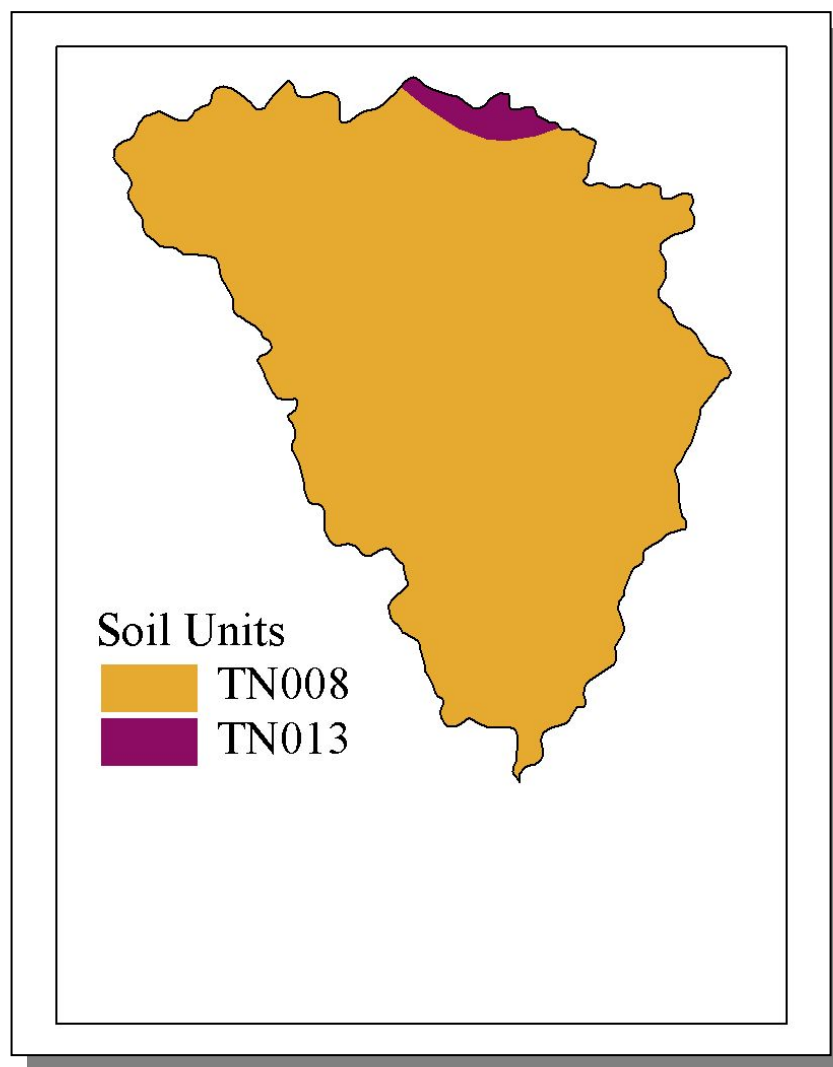


Figure 4-182. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080411.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN013	72.00	C	1.30	5.44	Silty Loam	0.46

Table 4-168. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080411. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	2.71	526	534	536	1.9
Tipton	37,568	45,986	51,271	0.66	247	302	336	36.0
Total	57,005	65,695	71,068		773	836	872	12.8

Table 4-169. Population Estimates in Subwatershed 080102080411.



Figure 4-183. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080411. More information, including site names and locations, is provided in Appendix IV.

4.2.D.xi.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.xi.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Milk Cow	Hogs	Sheep
124	224	<5	44	<5

Table 4-170. Summary of Livestock Count Estimates in Subwatershed 080102080411. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Fayette	13,421	25,437	965	15	25,667	124
Haywood	3,442	6,220	29	237	1,740	12
Tipton	5,422	9,796	14	334	251	86

Table 4-171. Summary of Livestock Count Estimates in Fayette, Haywood, and Tipton Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.1	3.3
Haywood	71.2	71.2	1.7	6.4
Tipton	50.9	50.9	1.0	5.6

Table 4-172. Forest Acreage and Annual Removal Rates (1987-1994) in Fayette, Haywood, and Tipton Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.72
Grass (Hayland)	3.43
Legumes, Grass (Hayland)	0.22
Legumes (Hayland)	0.54
Grass, Forbs, Legumes (Mixed Pasture)	0.42
Corn (Row Crops)	7.48
Cotton (Row Crops)	13.17
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	9.01
Wheat (Close-Grown Cropland)	2.75
All Other Close-Grown Cropland	3.08
Other Vegetable and Truck Crops	7.04
Fruit (Horticultural)	0.76
Other Cropland not Planted	0.75
Conservation Reserve Program Lands	0.93
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.62

Table 4-173. Annual Estimated Total Soil Loss in Subwatershed 080102080411.

4.2.D.xii. 080102080412 (Cypress Creek).

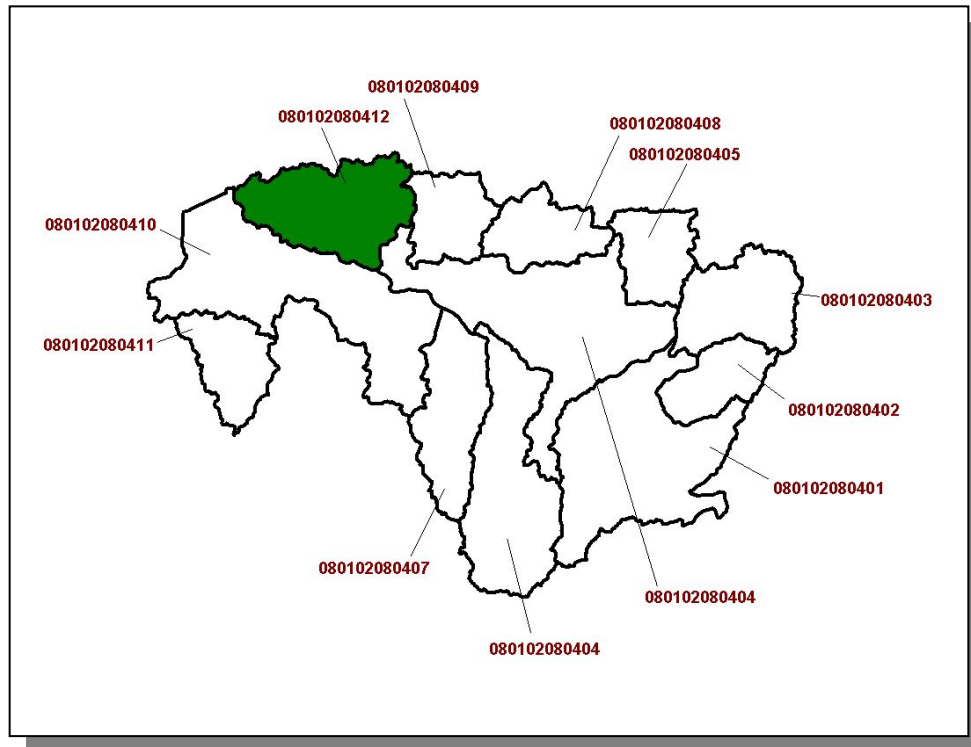


Figure 4-184. Location of Subwatershed 080102080412. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

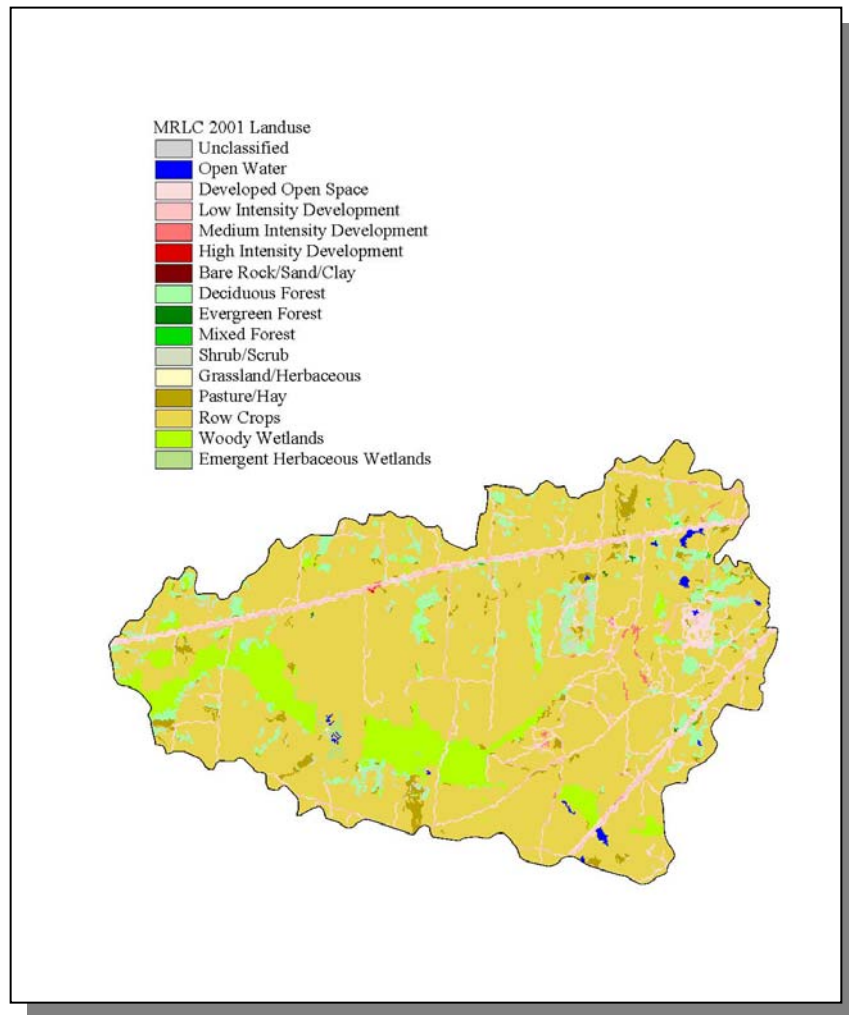


Figure 4-185. Illustration of Land Use Distribution in Subwatershed 080102080412.

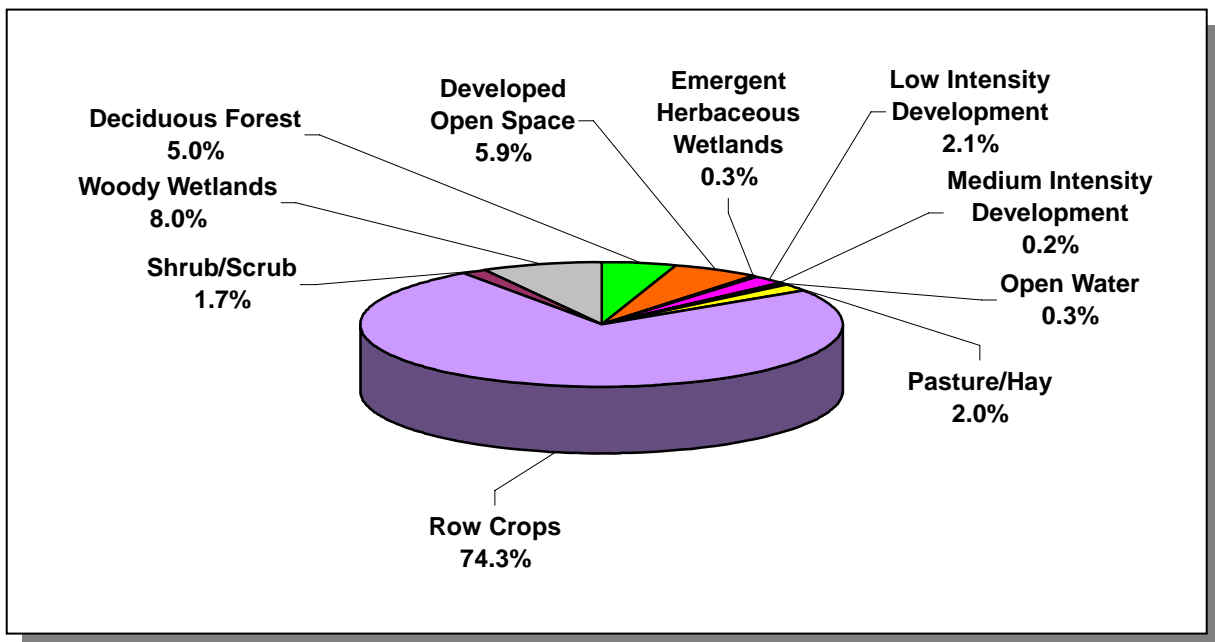


Figure 4-186. Land Use Distribution in Subwatershed 080102080412. More information is provided in Appendix IV.

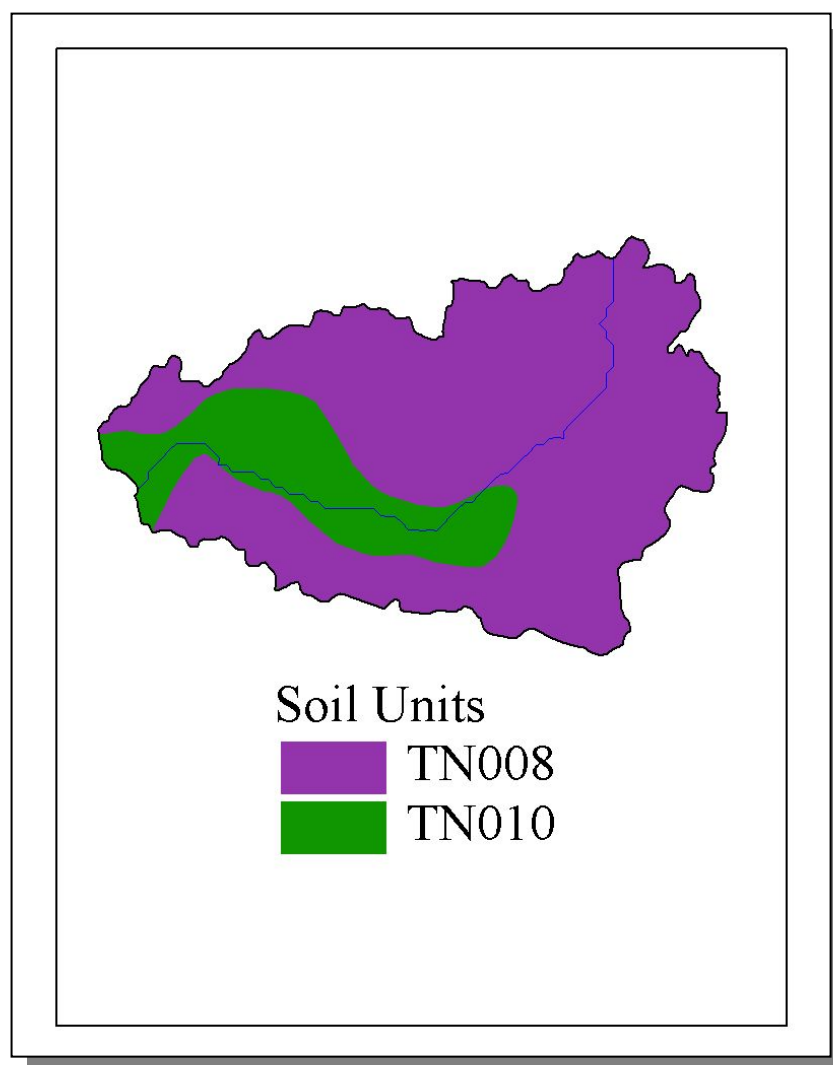


Figure 4-187. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080412.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44

Table 4-174. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080412. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	6.14	1,194	1,211	1,216	1.8

Table 4-175. Population Estimates in Subwatershed 080102080412.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Brownsville	Haywood	10,019	3,848	3,761	64	23

Table 4-176. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080412.

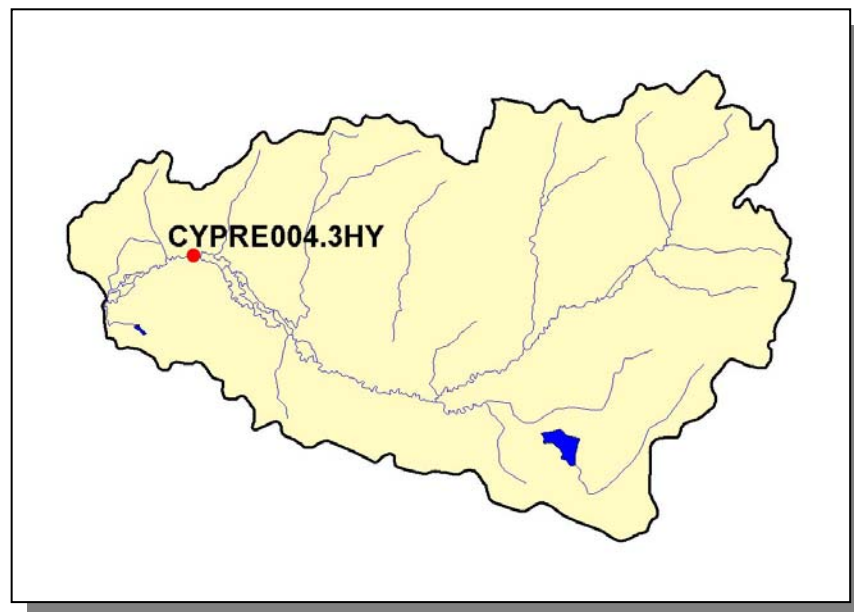


Figure 4-188. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080412. More information, including site names and locations, is provided in Appendix IV.

4.2.D.xii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.D.xii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Milk Cow	Hogs	Sheep
175	316	<5	88	<5

Table 4-177. Summary of Livestock Count Estimates in Subwatershed 080102080412. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12

Table 4-178. Summary of Livestock Count Estimates in Haywood County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Haywood	71.2	71.2	1.7	6.4

Table 4-179. Forest Acreage and Annual Removal Rates (1987-1994) in Haywood County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.70
Grass (Hayland)	3.69
Grass, Forbs, Legumes (Mixed Pasture)	0.30
Corn (Row Crops)	7.47
Cotton (Row Crops)	12.50
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	7.10
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	4.20
Other Cropland not Planted	0.85
Conservation Reserve Program Lands	0.91
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.61

Table 4-180. Annual Estimated Total Soil Loss in Subwatershed 080102080412.

4.2.E. 0801020805.

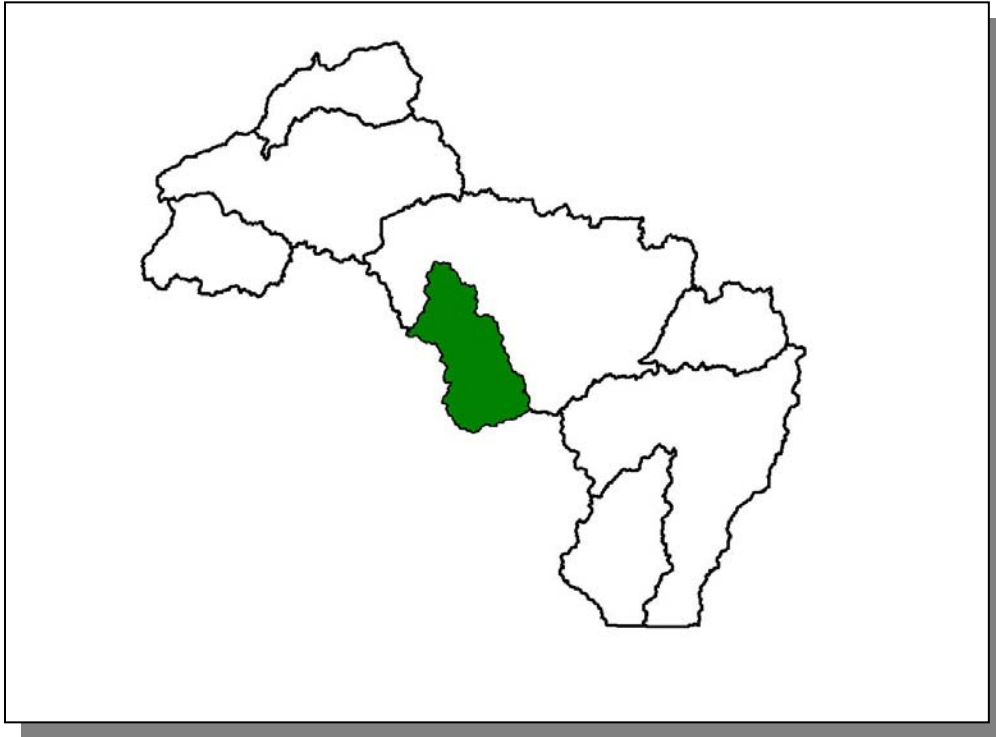


Figure 4-189. Location of Subwatershed 0801020805. All Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.E.i. 080102080501 (Upper Big Muddy Creek).

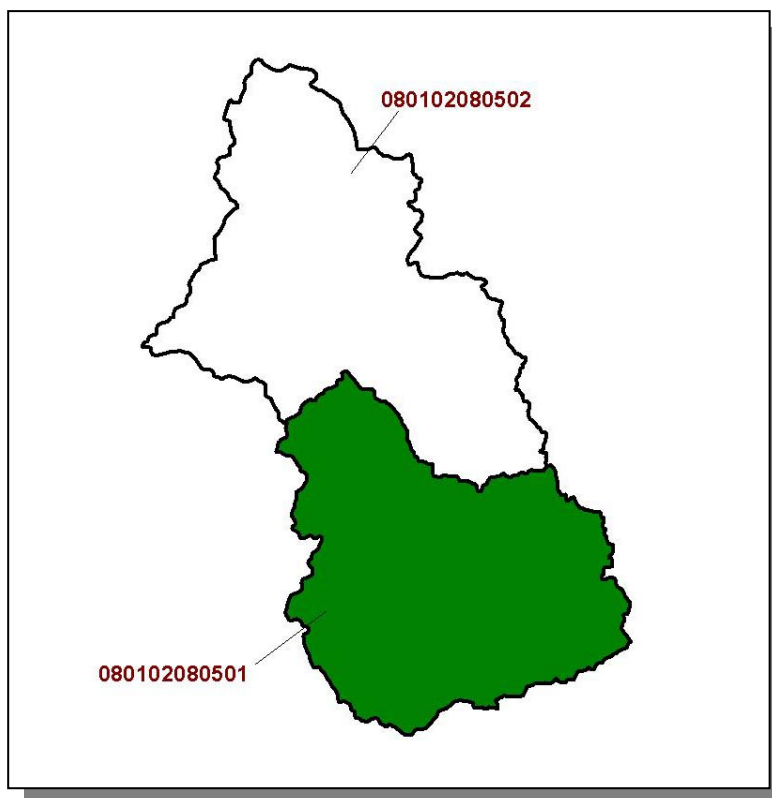


Figure 4-190. Location of Subwatershed 080102080501. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

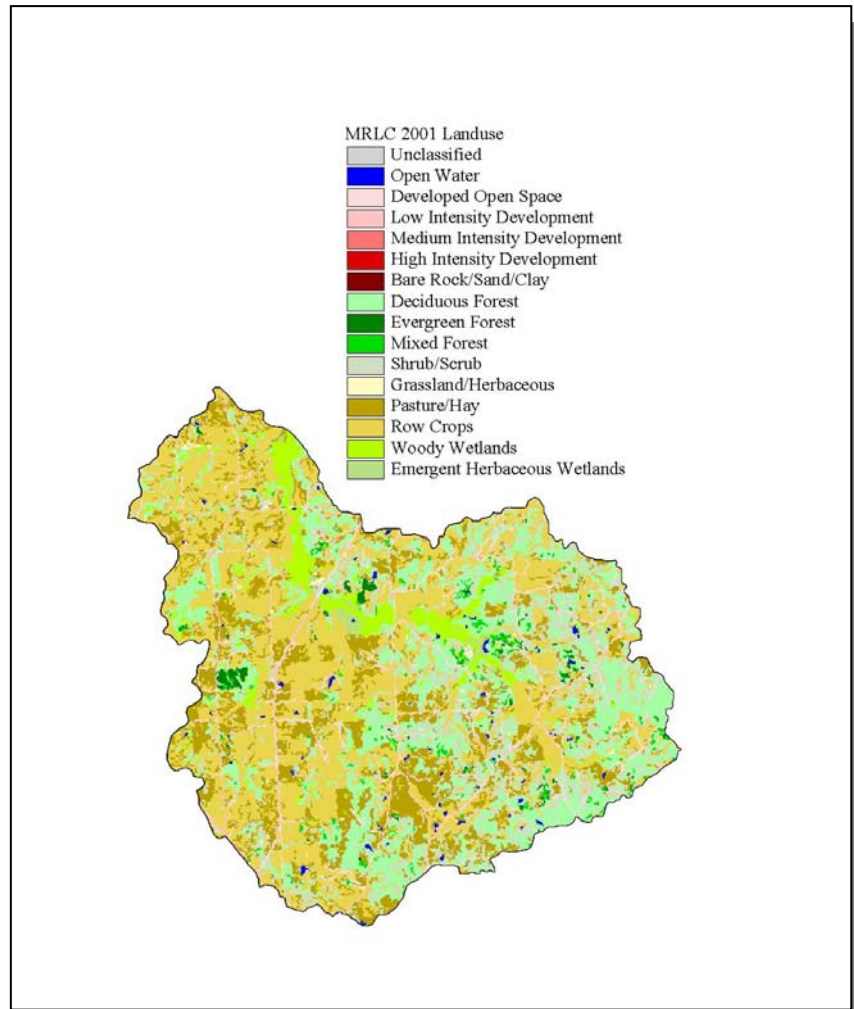


Figure 4-191. Illustration of Land Use Distribution in Subwatershed 080102080501.

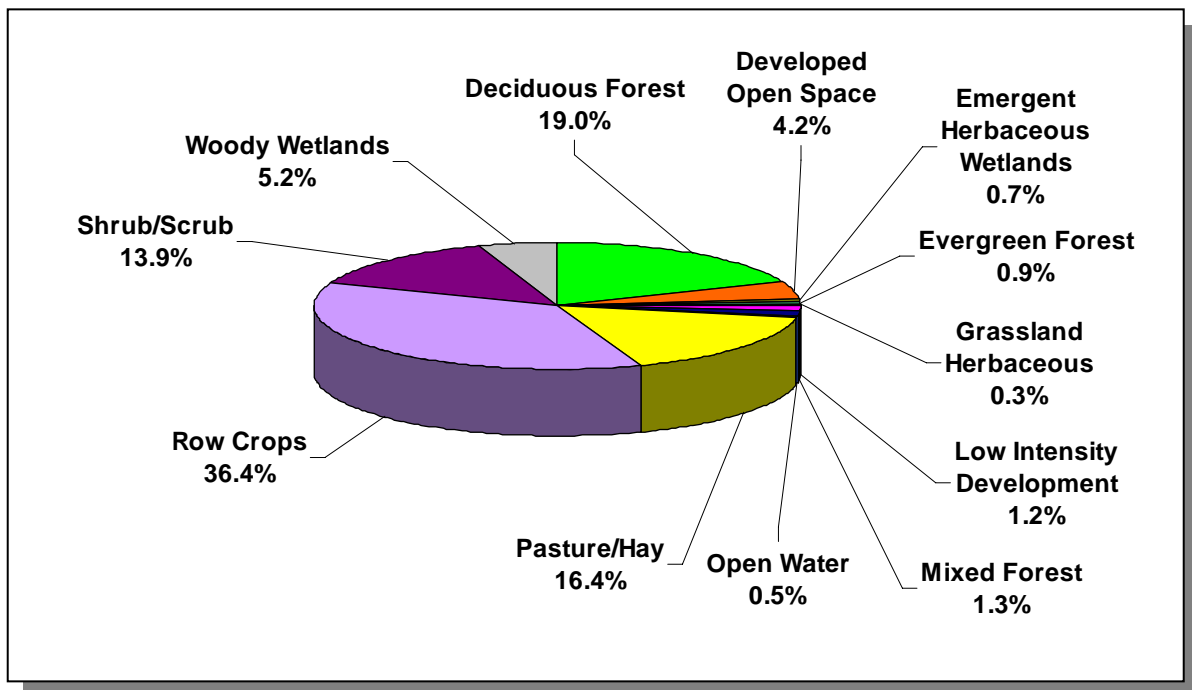


Figure 4-192. Land Use Distribution in Subwatershed 080102080501. More information is provided in Appendix IV.

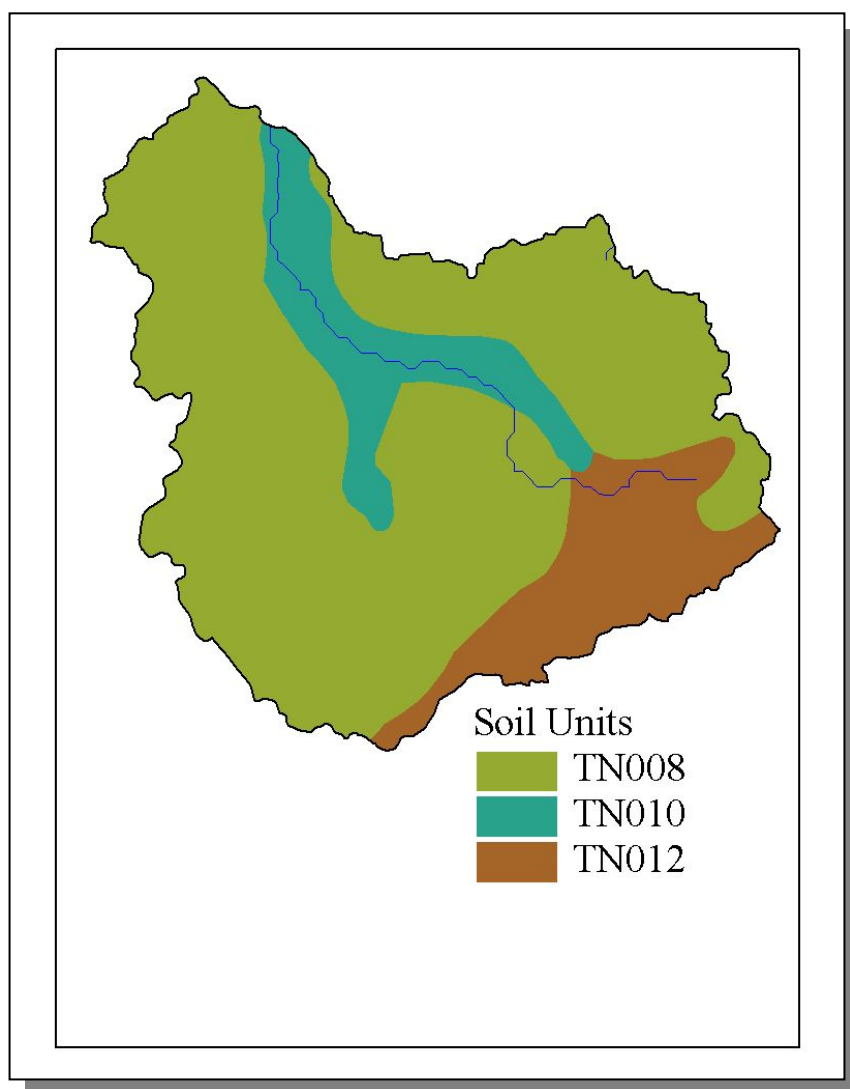


Figure 4-193. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080501.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.0	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39

Table 4-181. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080501. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Fayette	25,559	29,412	28,806	6.82	1,742	2,005	1,964	12.7

Table 4-182. Population Estimates in Subwatershed 080102080501.

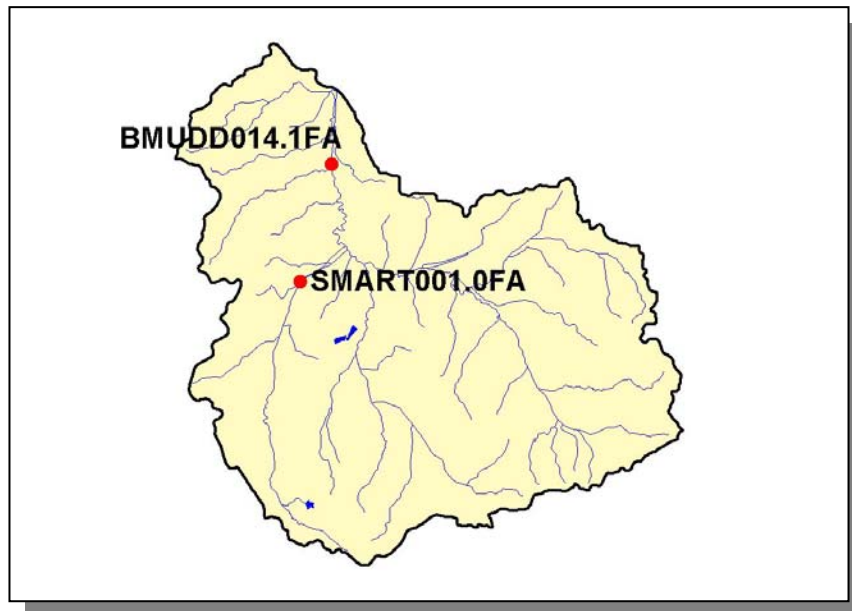


Figure 4-194. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080501. More information, including site names and locations, is provided in Appendix IV.

4.2.E.i.a. Point Source Contributions.

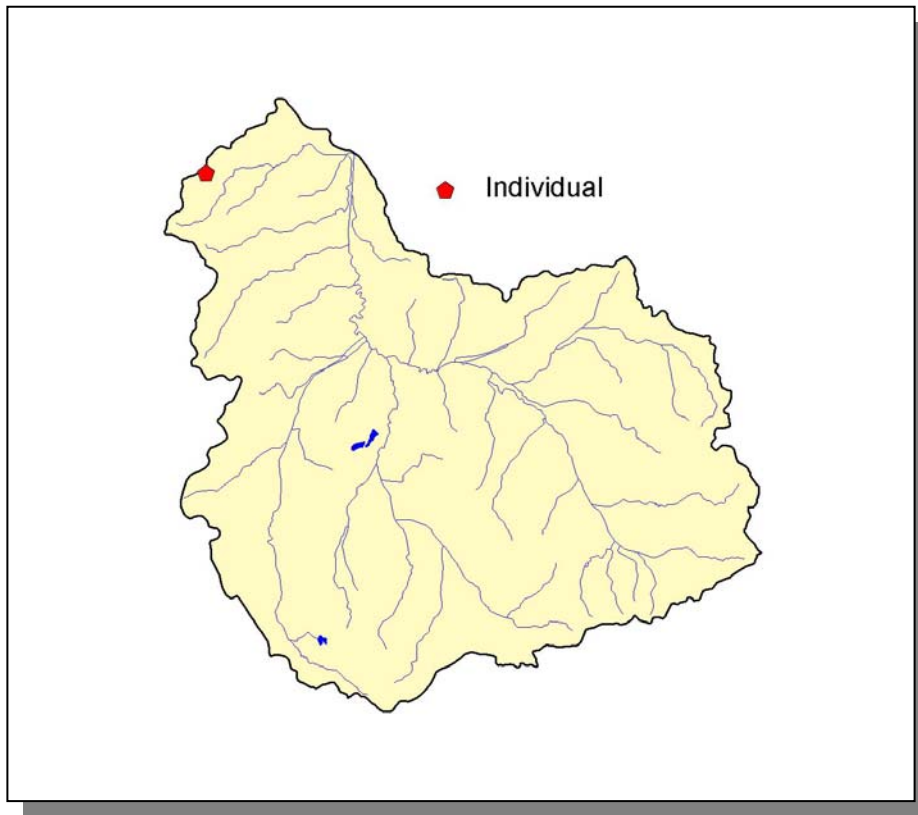


Figure 4-195. Location of Permits Issued in Subwatershed 080102080501. More information, including the names of facilities, is provided in Appendix IV.

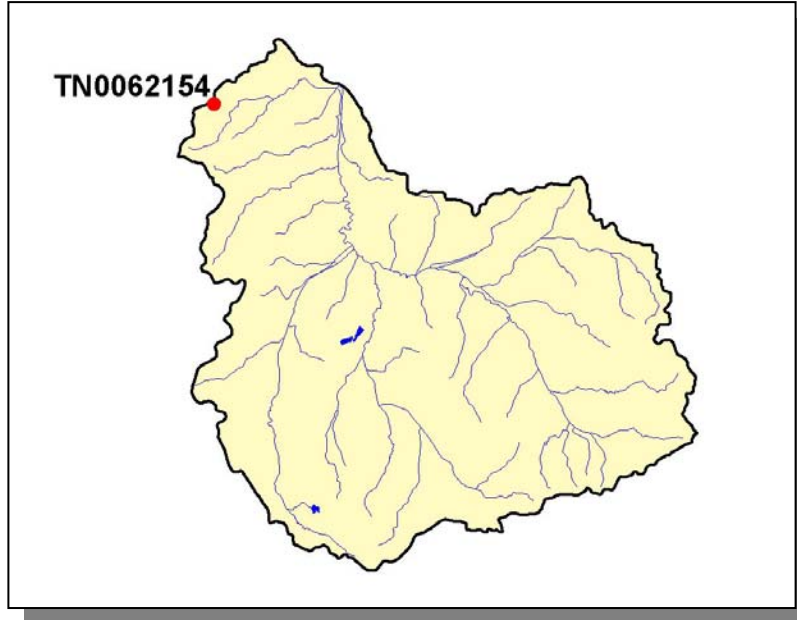


Figure 4-196. Location of Active NPDES Sites in Subwatershed 080102080501. More information, including the names of facilities, is provided in Appendix IV.

4.2.E.i.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2004 303(d) list in Subwatershed 080102080501:

- TN0062154 (Stanton Lagoon) discharges to an unnamed tributary @ RM 0.4 to Big Muddy Creek @ RM 7.6

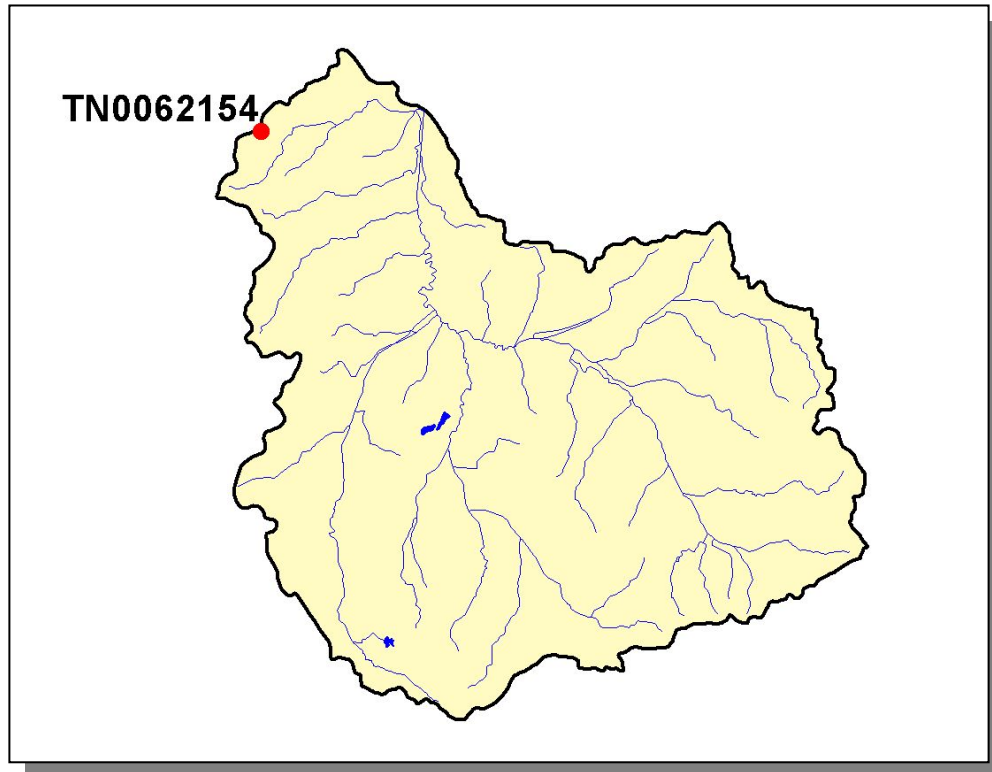


Figure 4-197. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 080102080501. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	3Q2	1Q10	3Q10	3Q20	7Q10
TN0062154	0.01	na	0.00	0.00	0.00

Table 4-183. Receiving Stream Low Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080501. Data are in cubic feet per second (CFS). Data were obtained from the USGS web application StreamStats at <http://water.usgs.gov/osw/streamstats/>. (na, data not available)

PERMIT #	FLOW
TN0062154	X

Table 4-184. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080501.

PERMIT #	CBOD ₅	<i>E. coli</i>	FECAL COLIFORM	TRC	TSS	SETTLEABLE SOLIDS	DO	pH
TN0062154	X	X	X	X	X	X	X	X

Table 4-185. Inorganic Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080501. CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids; DO, Dissolved Oxygen.

4.2.E.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
1,137	2,155	82	<5	2,174	11

Table 4-186. Summary of Livestock Count Estimates in Subwatershed 080102080501. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Fayette	13,421	25,437	965	15	15,667	124

Table 4-187. Summary of Livestock Count Estimates in Fayette County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.1	3.3

Table 4-188. Forest Acreage and Annual Removal Rates (1987-1994) in Fayette County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.43
Grass (Hayland)	0.33
Legumes, Grass (Hayland)	0.22
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.76
Corn (Row Crops)	19.66
Cotton (Row Crops)	9.05
Soybeans (Row Crops)	9.86
Wheat (Close-Grown Cropland)	2.75
Fruits (Horticultural)	0.39
Other Cropland not Planted	1.50
Conservation Reserve Program Lands	0.45
Farmsteads and Ranch Headquarters	0.13

Table 4-189. Annual Estimated Total Soil Loss in Subwatershed 080102080501.

4.2.E.ii. 080102080502 (Lower Big Muddy Creek).

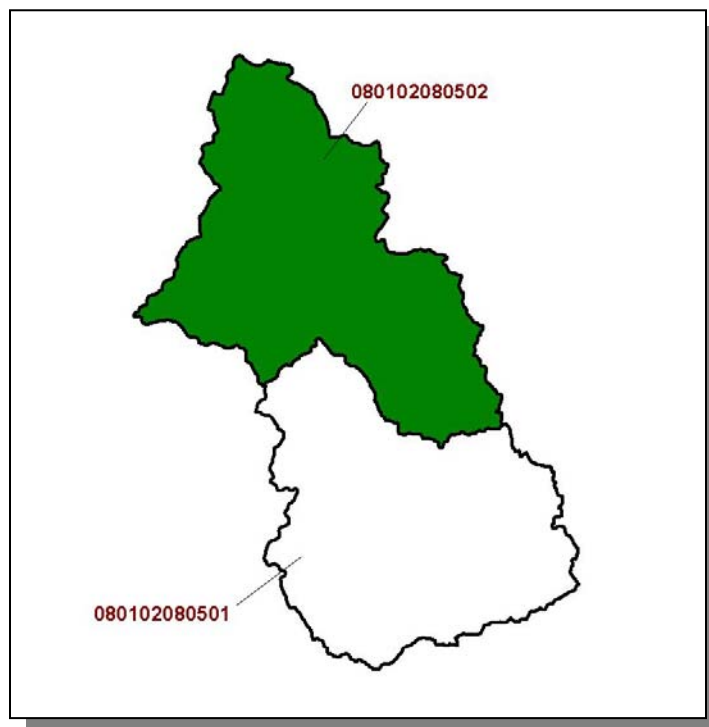


Figure 4-198. Location of Subwatershed 080102080502. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

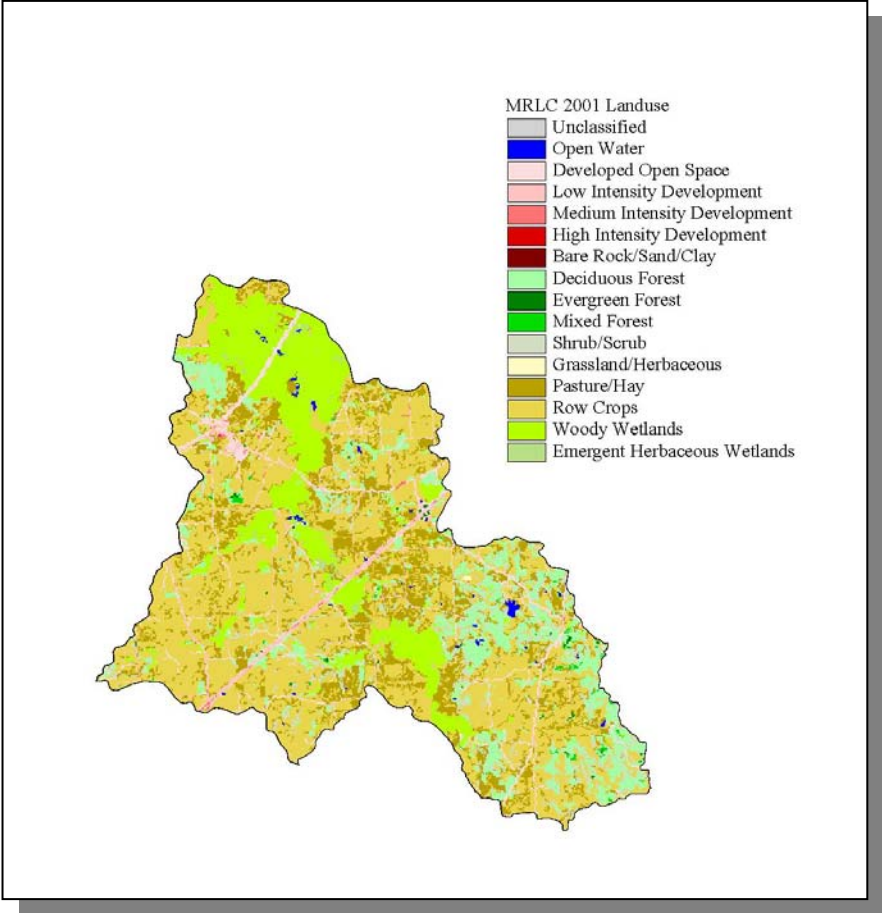


Figure 4-199. Illustration of Land Use Distribution in Subwatershed 080102080502.

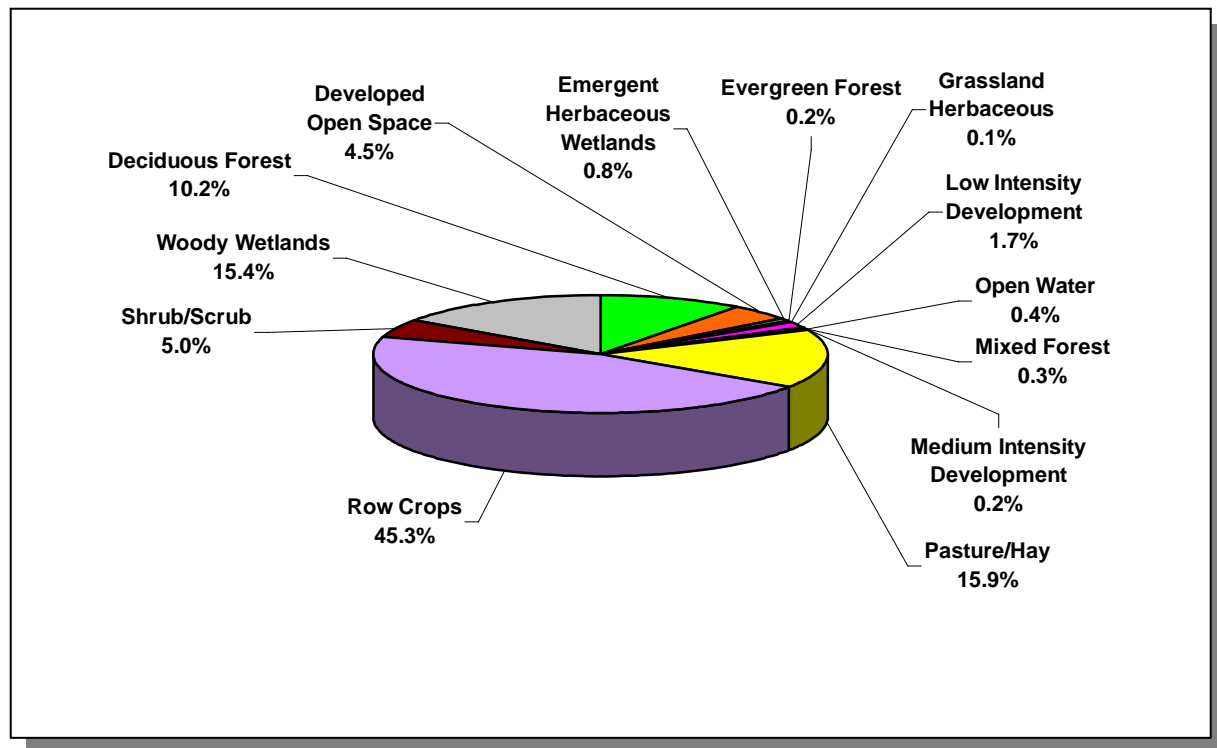


Figure 4-200. Land Use Distribution in Subwatershed 080102080502. More information is provided in Appendix IV.

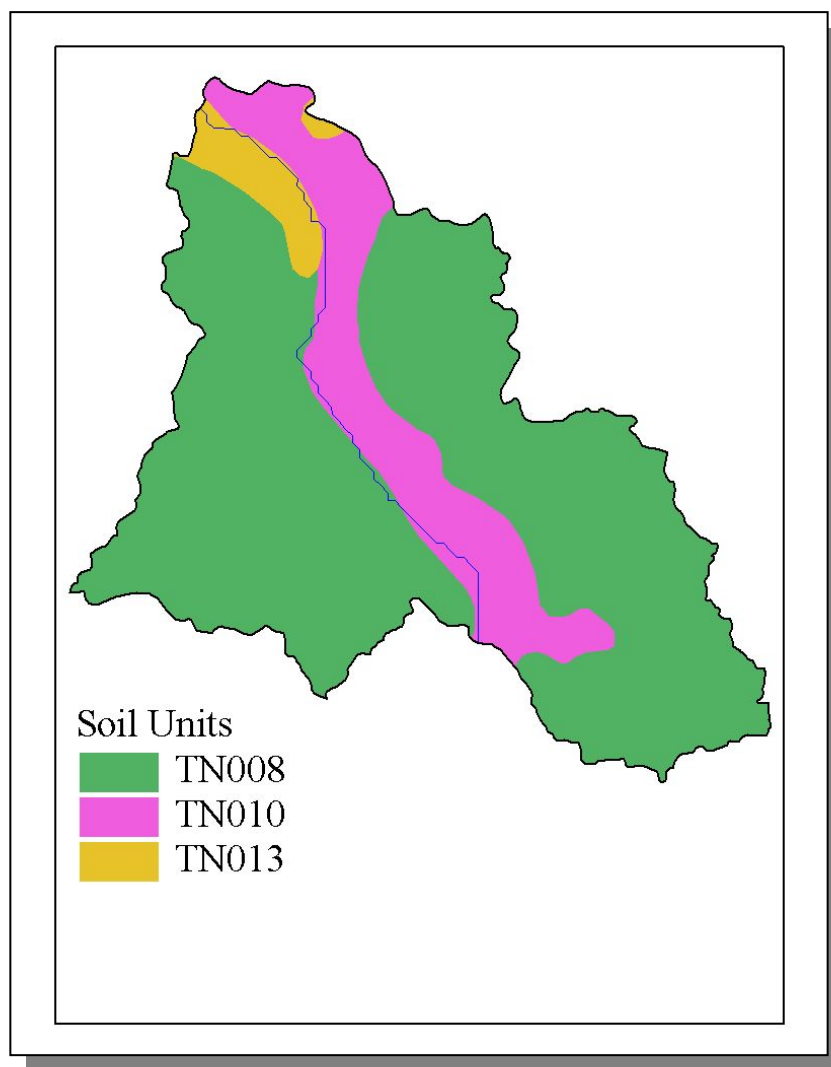


Figure 4-201. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080502.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46

Table 4-190. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080502. The definition of “Hydrologic Group” is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Fayette	25,559	29,412	28,806	2.28	582	670	656	12.7
Haywood	19,437	19,709	19,797	6.29	1,222	1,239	1,244	1.8
Total	44,996	49,121	48,603		1,804	1,909	1,900	5.3

Table 4-191. Population Estimates in Subwatershed 080102080502.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Stanton	Haywood	517	223	216	2	5

Table 4-192. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080502.

4.2.E.ii.a. Point Source Contributions.

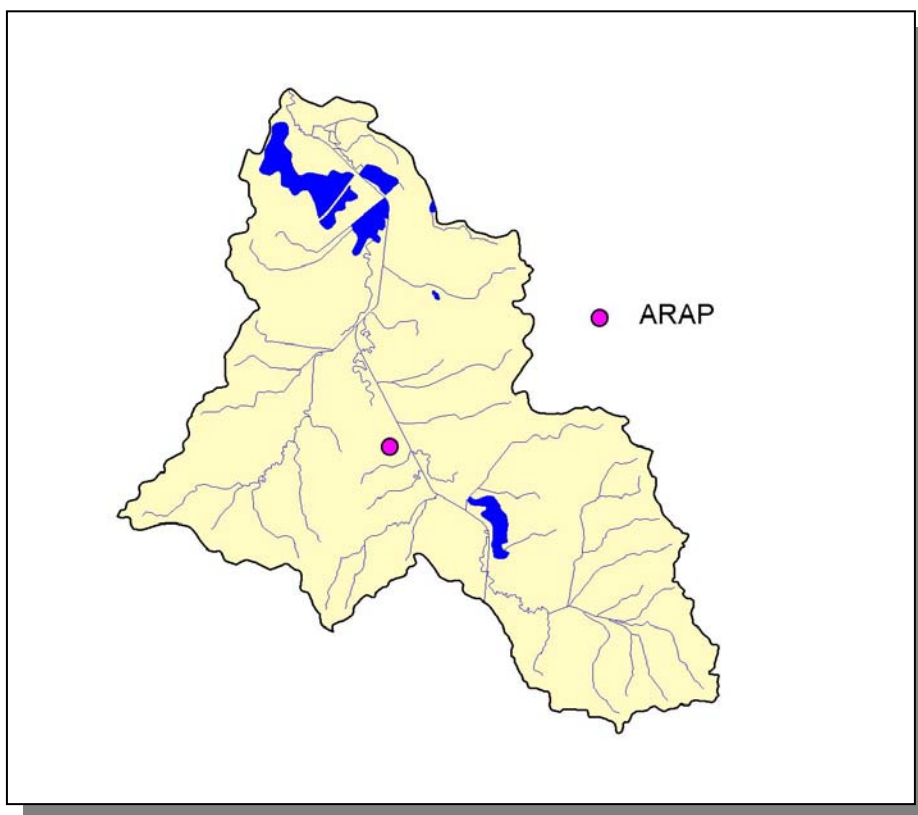


Figure 4-202. Location of Permits Issued in Subwatershed 080102080502. More information, including the names of facilities, is provided in Appendix IV.

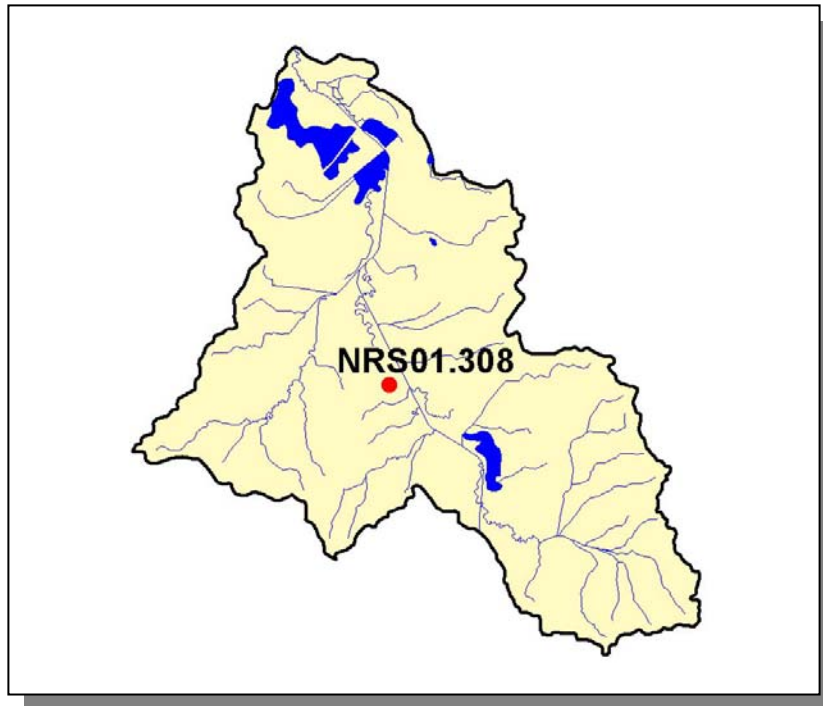


Figure 4-203. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080502. More information is provided in Appendix IV.

4.2.E.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
549	1,023	27	<5	773	<5

Table 4-193. Summary of Livestock Count Estimates in Subwatershed 080102080502.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Fayette	13,421	25,437	965	15	25,667	124
Haywood	3,442	6,220	29	237	1,740	12

Table 4-194. Summary of Livestock Count Estimates in Fayette and Haywood Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.1	3.3
Haywood	71.2	71.2	1.7	6.4

Table 4-195. Forest Acreage and Annual Removal Rates (1987-1994) in Fayette and Haywood Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.61
Grass (Hayland)	2.62
Legumes, Grass (Hayland)	0.22
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	0.45
Corn (Row Crops)	11.35
Cotton (Row Crops)	11.40
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	7.98
Wheat (Close-Grown Cropland)	2.75
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.64
Other Vegetable and Truck Crops	4.20
Other Cropland not Planted	1.06
Conservation Reserve Program Lands	0.76
Other Land in Farms	0.16
Farmsteads and Ranch Headquarters	0.46

Table 4-196. Annual Estimated Total Soil Loss in Subwatershed 080102080502.

4.2.F. 0801020806

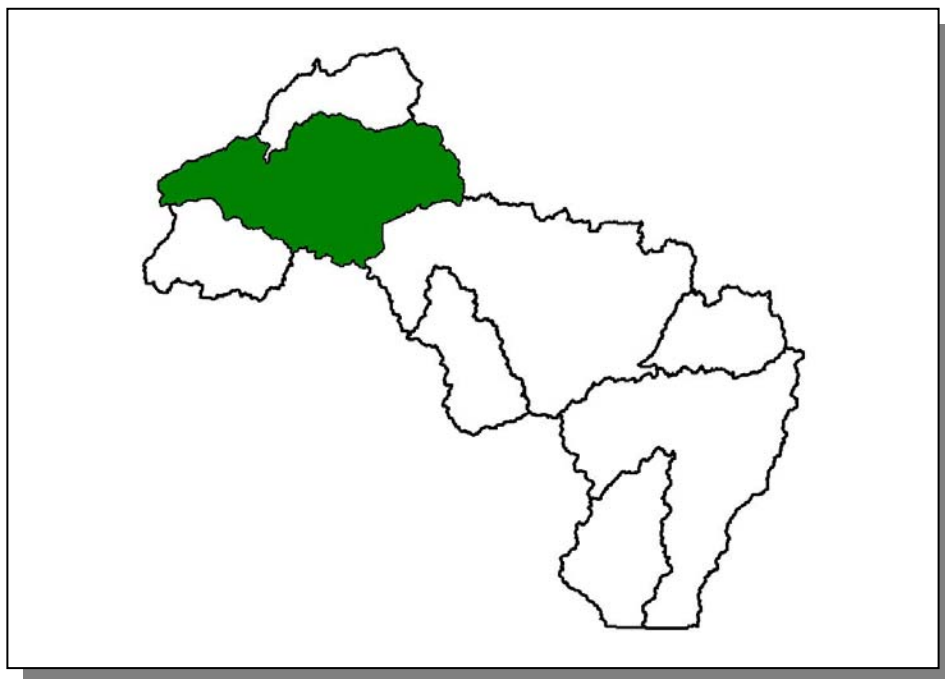


Figure 4-204. Location of Subwatershed 0801020806. All Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.F.i. 080102080601 (Hatchie River).

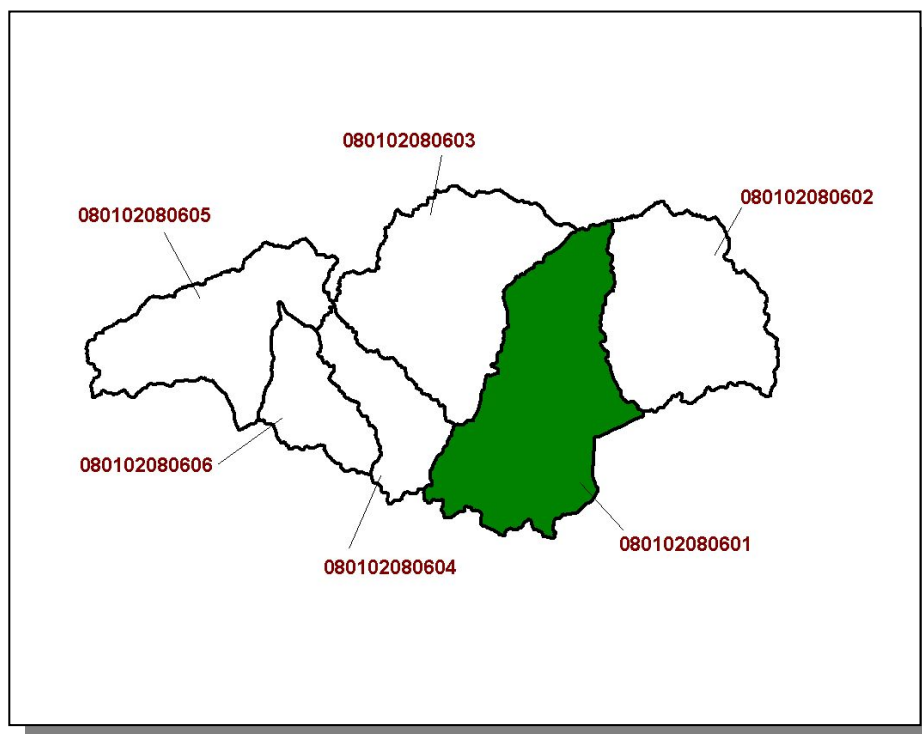


Figure 4-205. Location of Subwatershed 080102080601. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

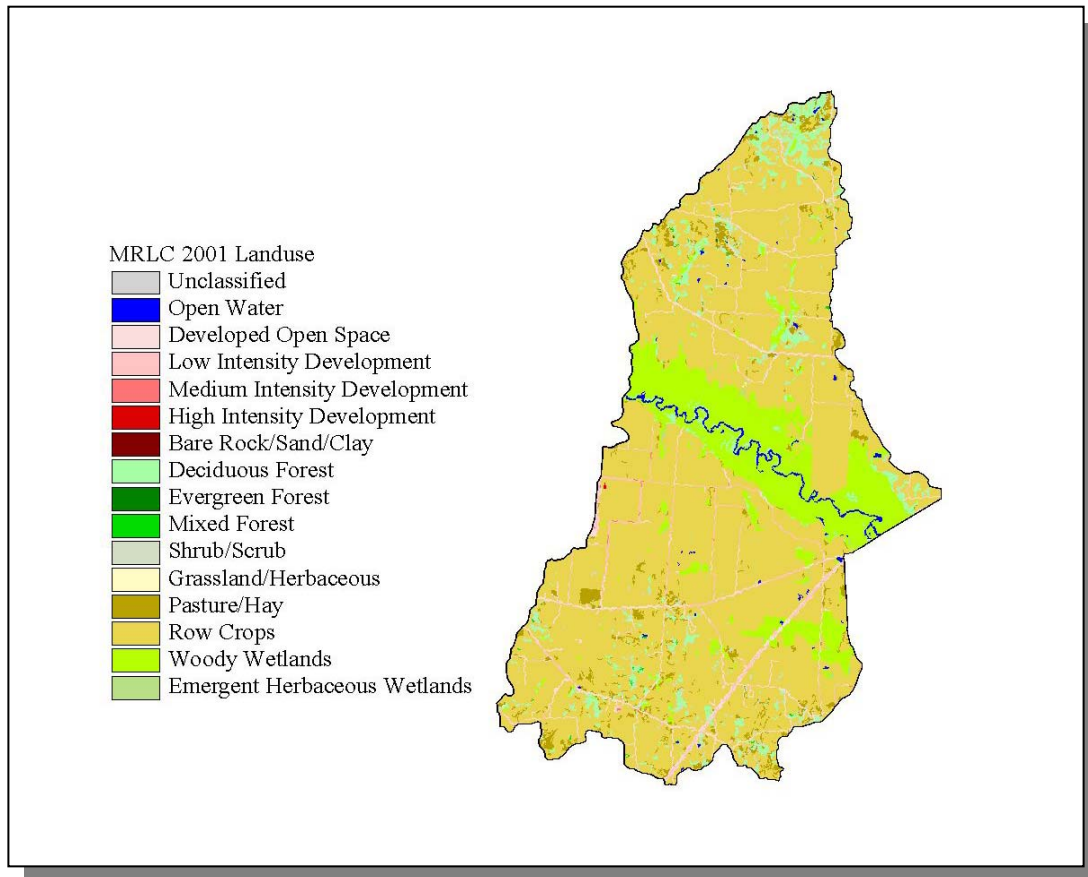


Figure 4-206. Illustration of Land Use Distribution in Subwatershed 080102080601.

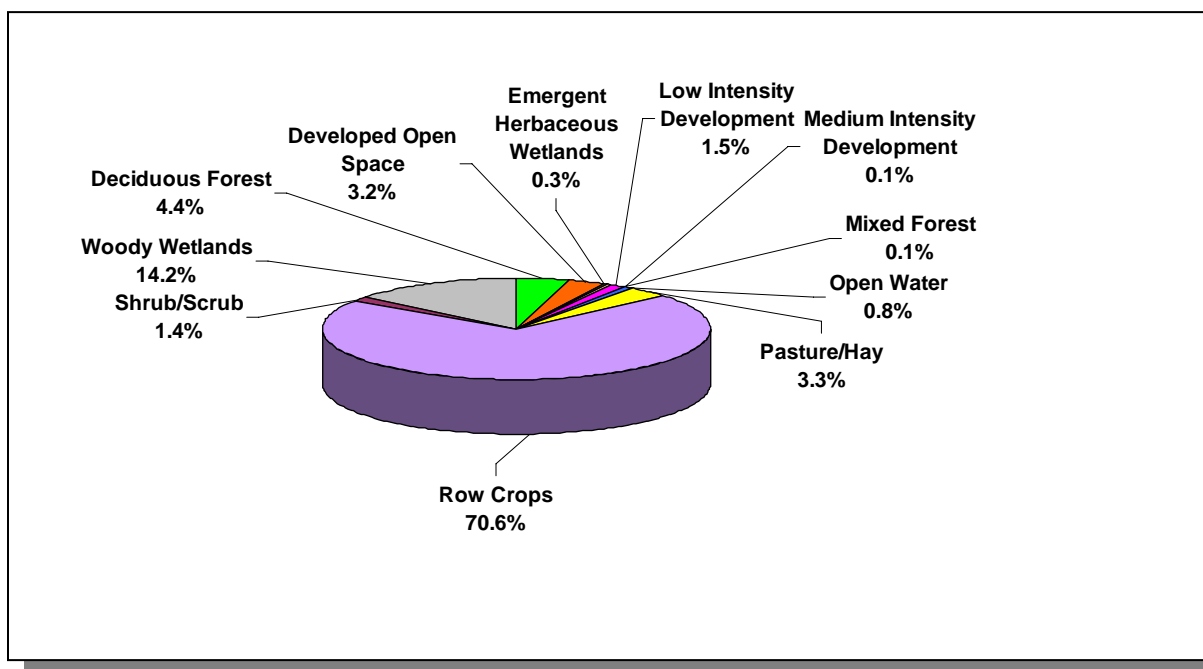


Figure 4-207. Land Use Distribution in Subwatershed 080102080601. More information is provided in Appendix IV.

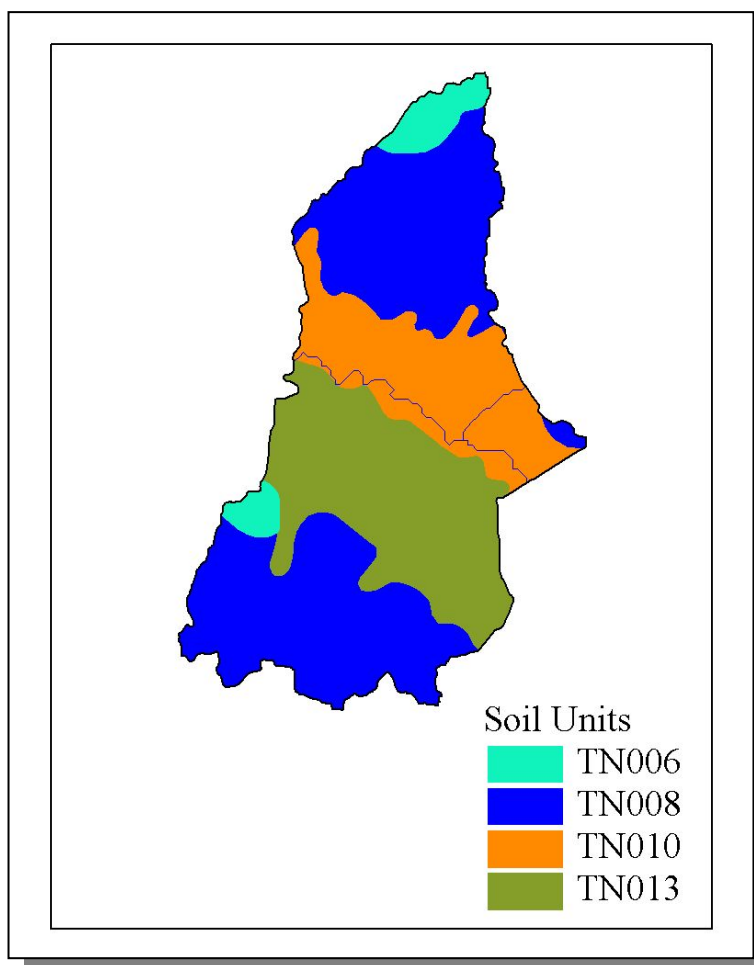


Figure 4-208. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080601.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46

Table 4-197. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080601. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	0.61	119	121	121	1.7
Lauderdale	23,491	24,128	27,101	4.96	1,165	1,197	1,344	15.4
Tipton	37,568	45,986	51,271	8.91	3,347	4,097	4,568	36.5
Total	80,496	89,823	98,169		4,631	5,415	6,033	30.3

Table 4-198. Population Estimates in Subwatershed 080102080601.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Covington	Tipton	7,487	2,920	2,717	203	0

Table 4-199. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080601.

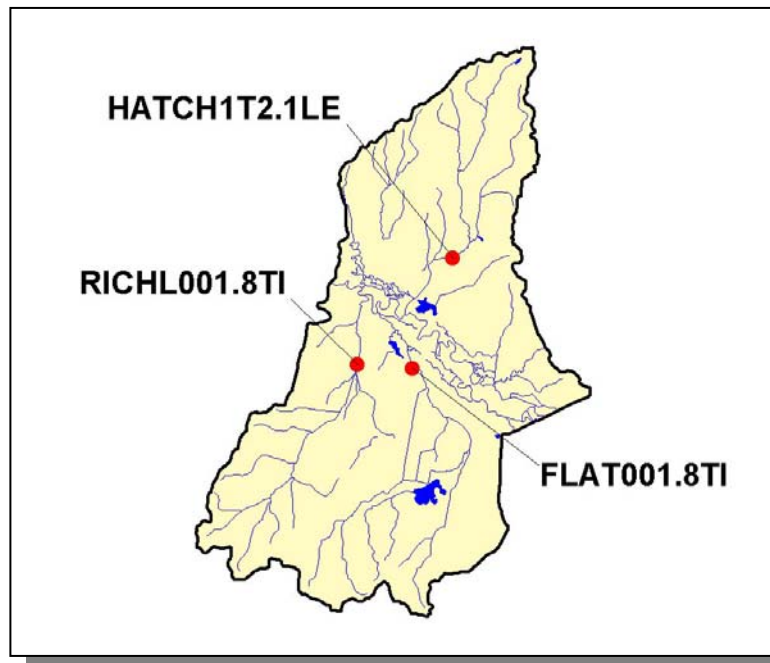


Figure 4-209. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080601. More information, including site names and locations, is provided in Appendix IV.

4.2.F.i.a. Point Source Contributions.

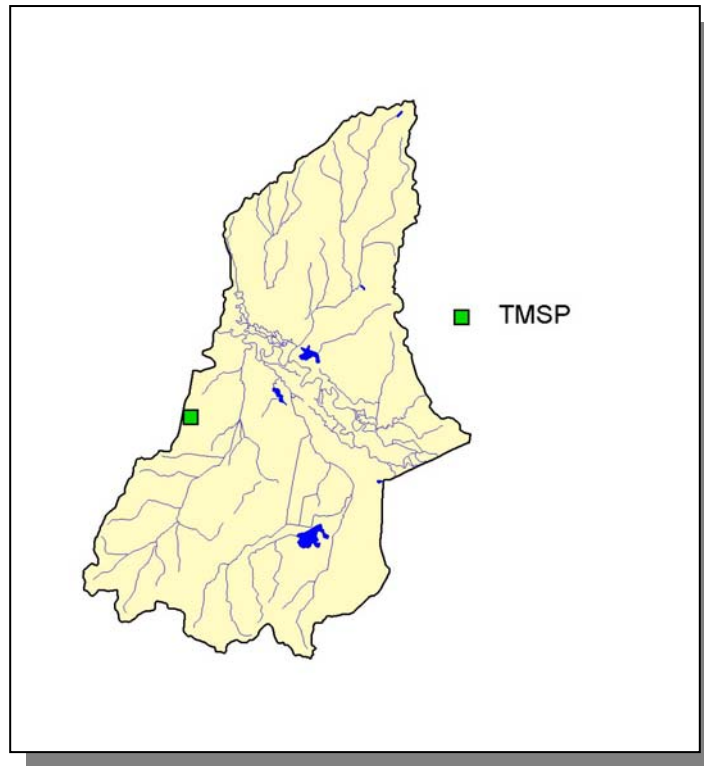


Figure 4-210. Location of Permits Issued in Subwatershed 080102080601. More information, including the names of facilities, is provided in Appendix IV.

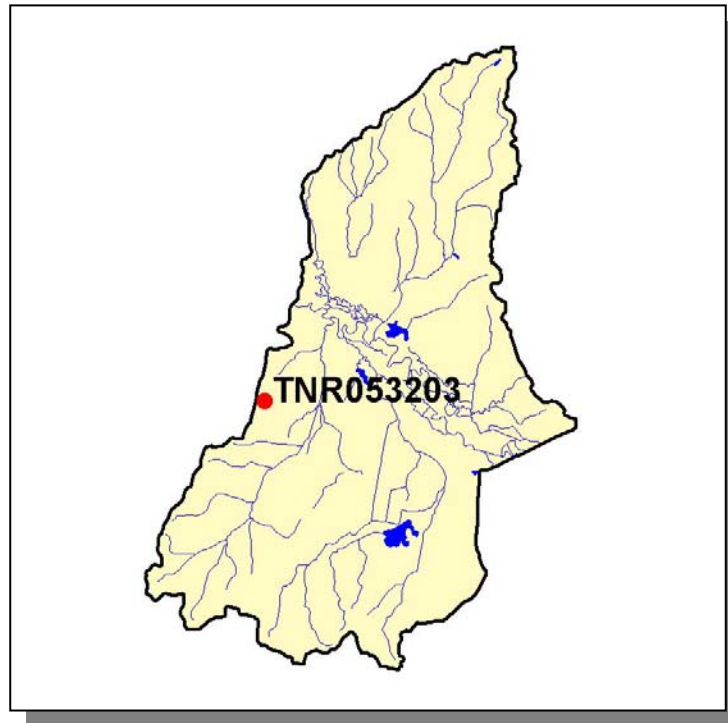


Figure 4-211. Location of TMSP Sites in Subwatershed 080102080601. More information, including the names of facilities, is provided in Appendix IV.

4.2.F.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
497	1,485	<5	<5	183	9

Table 4-200. Summary of Livestock Count Estimates in Subwatershed 080102080601. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12
Lauderdale	0	8,739	0	243	2,355	11
Tipton	5,422	9,796	14	334	251	86

Table 4-201. Summary of Livestock Count Estimates in Haywood, Lauderdale, and Tipton Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.36
Grass (Hayland)	1.54
Legumes, Grass (Hayland)	0.58
Legumes (Hayland)	1.58
Grass, Forbs, Legumes (Mixed Pasture)	1.49
Corn (Row Crops)	13.91
Cotton (Row Crops)	15.26
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	16.24
Wheat (Close-Grown Cropland)	9.27
All Other Close-Grown Cropland	3.08
Fruit (Horticulture)	0.76
Other Vegetable and Truck Crops	14.19
Summer Fallow (Other Cropland)	8.70
Other Cropland not Planted	0.27
Conservation Reserve Program Lands	1.31
Other Land in Farms	0.06
Farmsteads and Ranch Headquarters	0.46

Table 4-202. Annual Estimated Total Soil Loss in Subwatershed 080102080601.

4.2.F.ii. 080102080602 (Lagoon Creek).

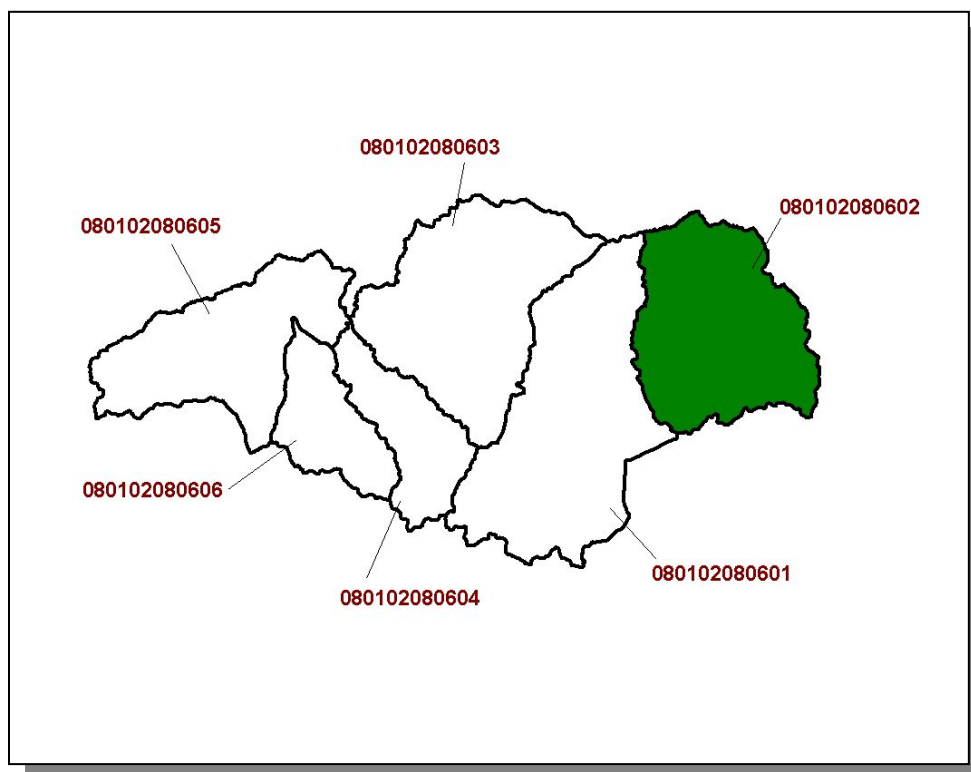


Figure 4-212. Location of Subwatershed 080102080602. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

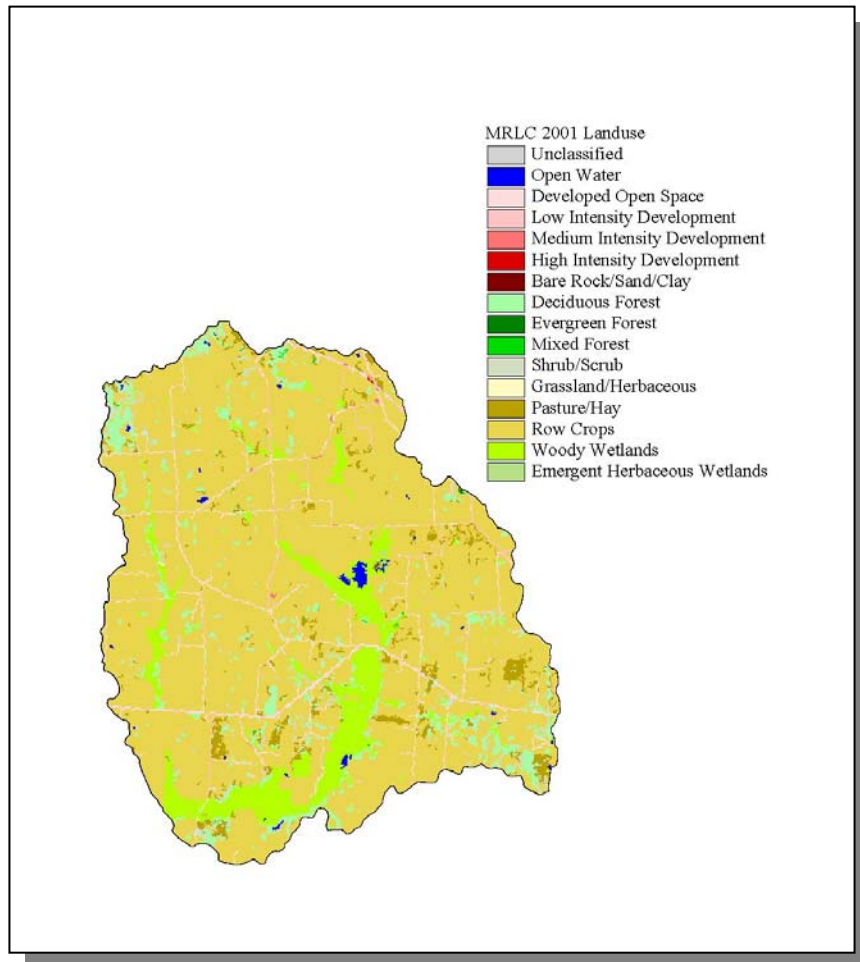


Figure 4-213. Illustration of Land Use Distribution in Subwatershed 080102080602.

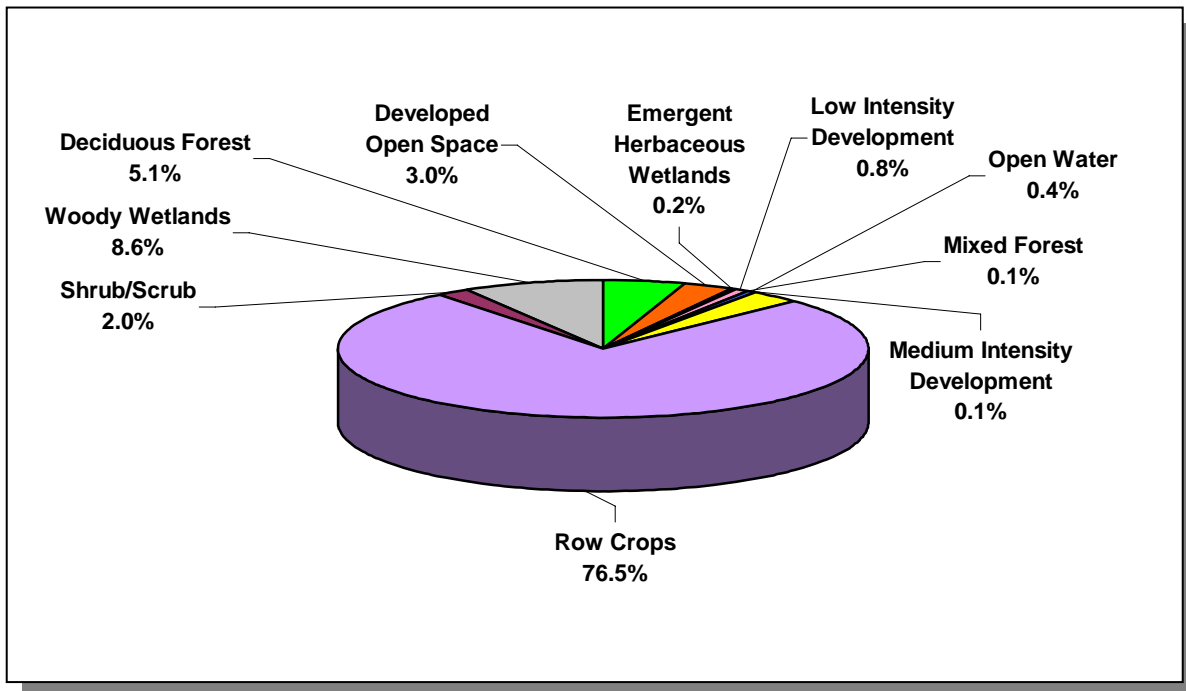


Figure 4-214. Land Use Distribution in Subwatershed 080102080602. More information is provided in Appendix IV.

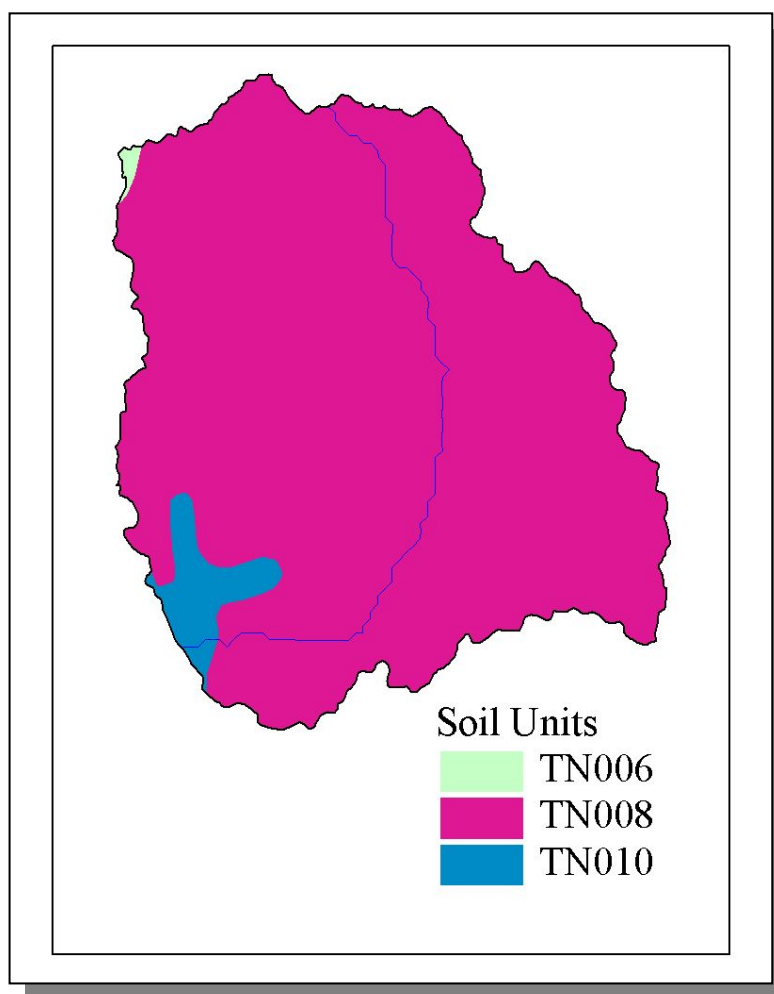


Figure 4-215. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080602.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44

Table 4-203. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080602. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	7.5	1,458	1,478	1,485	1.9
Lauderdale	23,491	24,128	27,101	1.98	465	477	536	15.3
Total	42,928	43,837	46,898		1,923	1,955	2,021	5.1

Table 4-204. Population Estimates in Subwatershed 080102080602.



Figure 4-216. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080602. More information, including site names and locations, is provided in Appendix IV.

4.2.F.ii.a. Point Source Contributions.

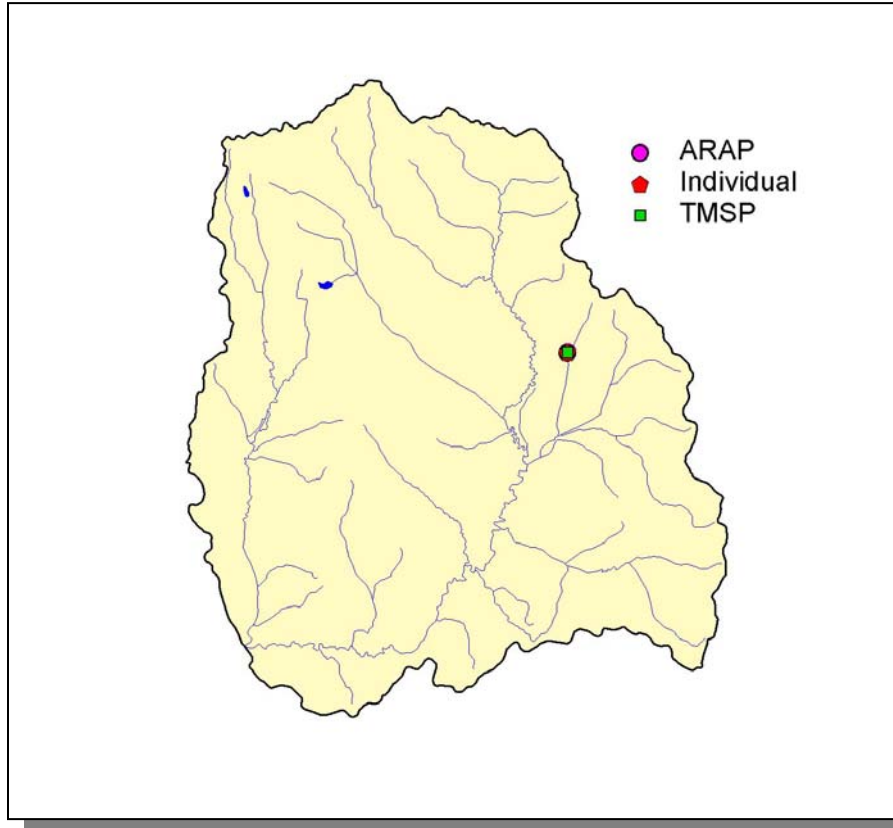


Figure 4-217. Location of Permits Issued in Subwatershed 080102080602. More information, including the names of facilities, is provided in Appendix IV.

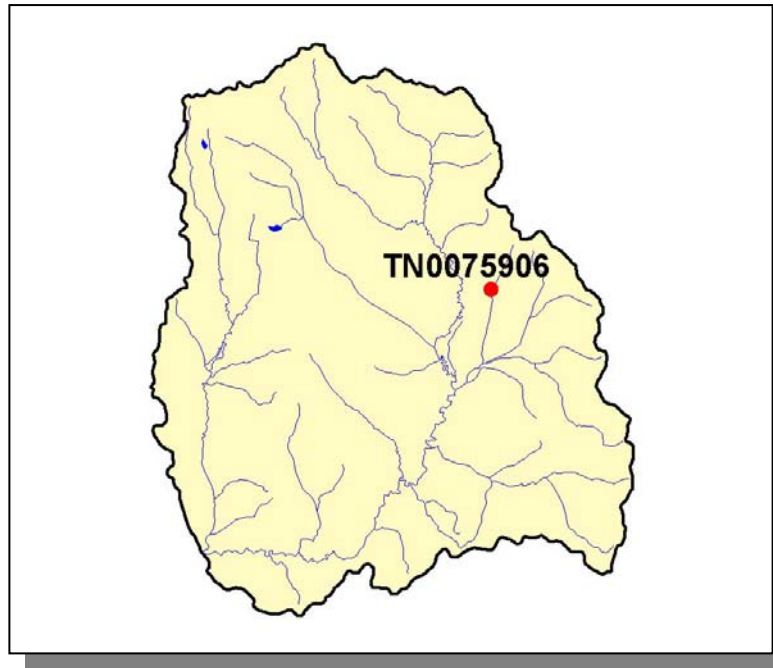


Figure 4-218. Location of Active NPDES Sites in Subwatershed 080102080602. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-219. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080602. More information is provided in Appendix IV.



Figure 4-220. Location of TMSP Sites in Subwatershed 080102080602. More information, including the names of facilities, is provided in Appendix IV.

4.2.F.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
264	755	<5	<5	208	<5

Table 4-205. Summary of Livestock Count Estimates in Subwatershed 080102080602. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12
Lauderdale	0	8,739	0	243	2,355	11

Table 4-206. Summary of Livestock Count Estimates in Haywood and Lauderdale Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.01
Grass (Hayland)	3.04
Legumes, Grass (Hayland)	0.58
Legumes (Hayland)	0.65
Grass, Forbs, Legumes (Mixed Pasture)	0.71
Corn (Row Crops)	8.90
Cotton (Row Crops)	12.70
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	8.35
Wheat (Close-Grown Cropland)	9.27
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	4.16
Summer Fallow (Other Cropland)	8.70
Other Cropland not Planted	0.85
Conservation Reserve Program Lands	1.08
Other Land in Farms	0.14
Farmsteads and Ranch Headquarters	0.51

Table 4-207. Annual Estimated Total Soil Loss in Subwatershed 080102080602.

4.2.F.iii. 080102080603 (Hatchie River).

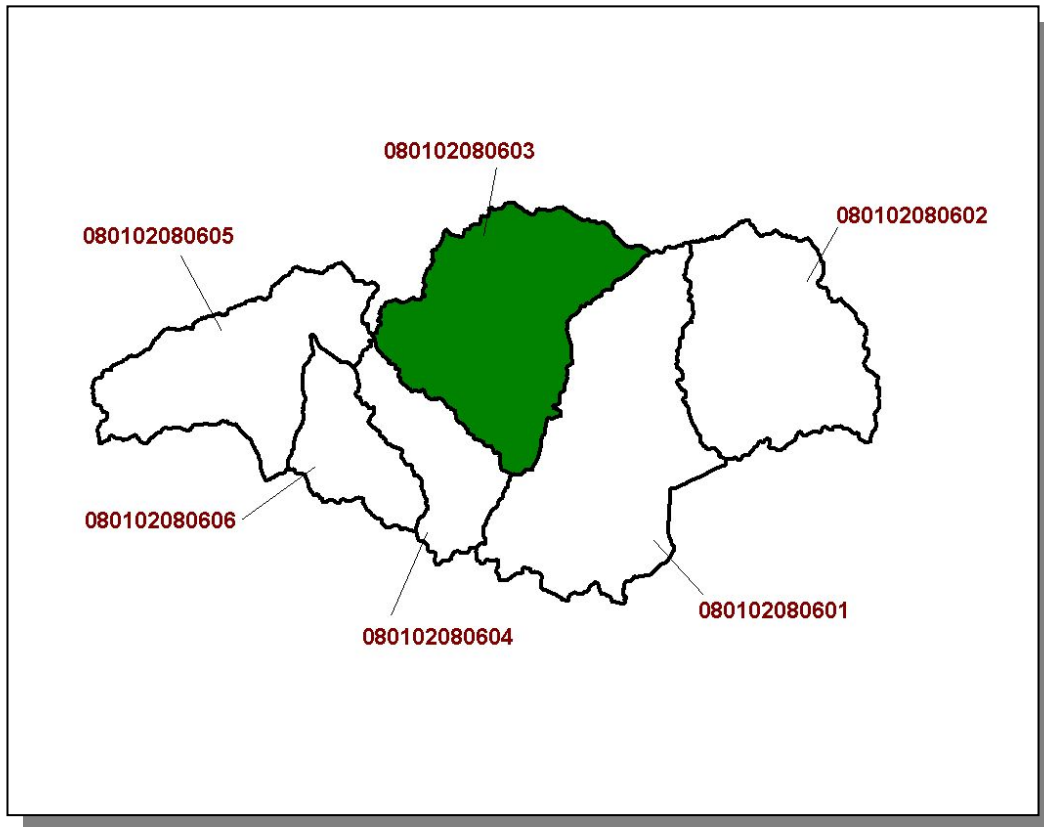


Figure 4-221. Location of Subwatershed 080102080603. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

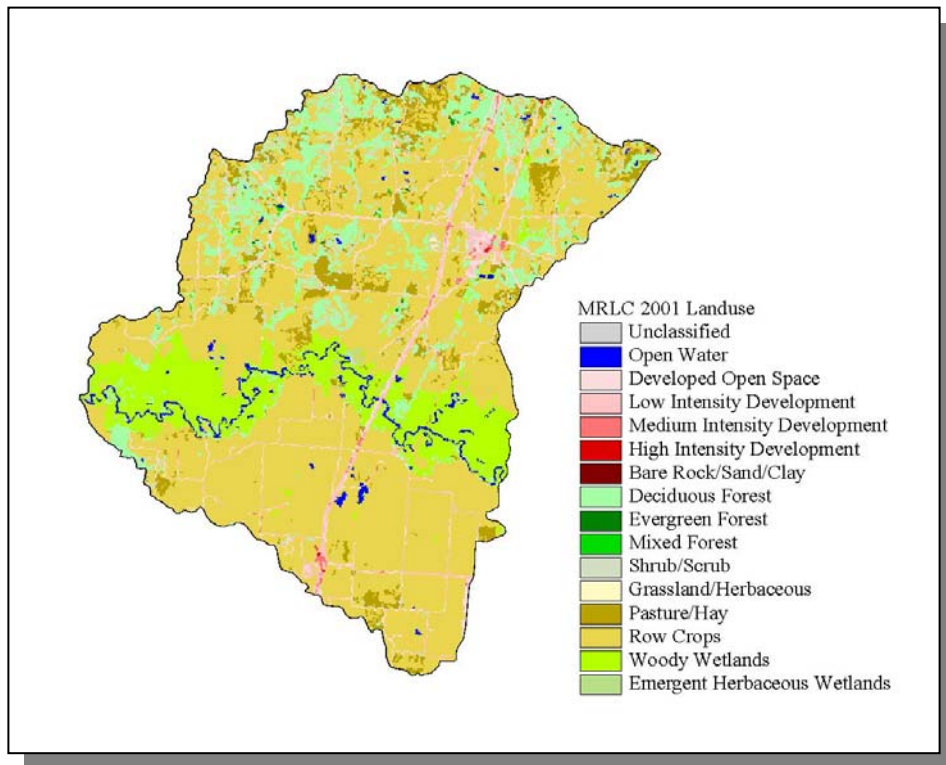


Figure 4-222. Illustration of Land Use Distribution in Subwatershed 080102080603.

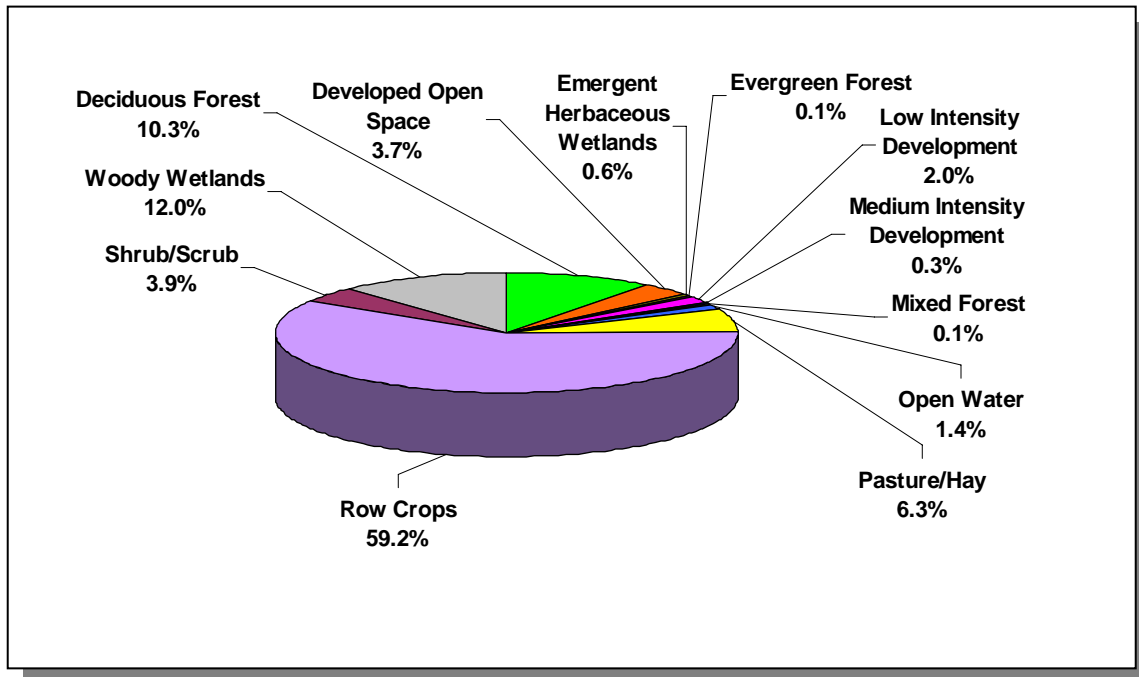


Figure 4-223. Land Use Distribution in Subwatershed 080102080603. More information is provided in Appendix IV.

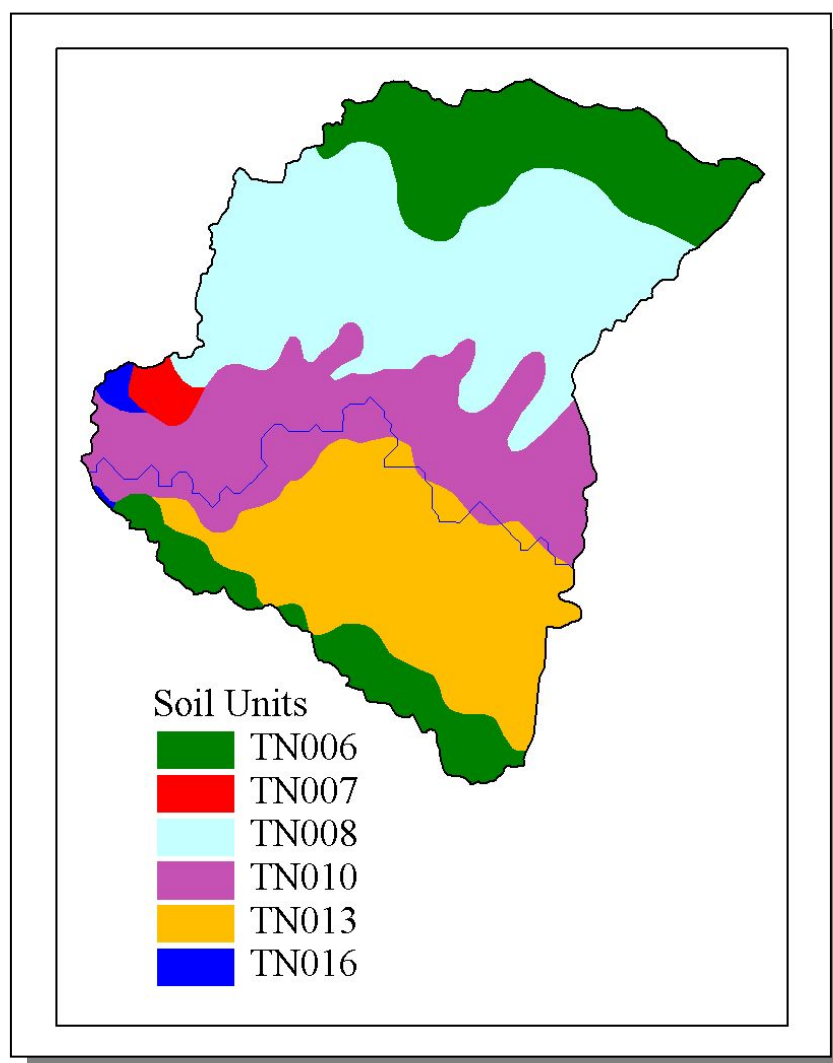


Figure 4-224. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080603.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-208. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080603. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Lauderdale	23,491	24,128	27,101	7.49	1,761	1,808	2,031	15.3
Tipton	37,568	45,986	51,271	4.35	1,634	2,000	2,230	36.5
Total	61,059	70,114	78,372		3,395	3,808	4,261	25.5

Table 4-209. Population Estimates in Subwatershed 080102080603

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Covington	Tipton	7,487	2,920	2,717	203	0
Henning	Lauderdale	815	324	295	21	8
Total		8,302	3,264	3,012	224	8

Table 4-210. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080603.

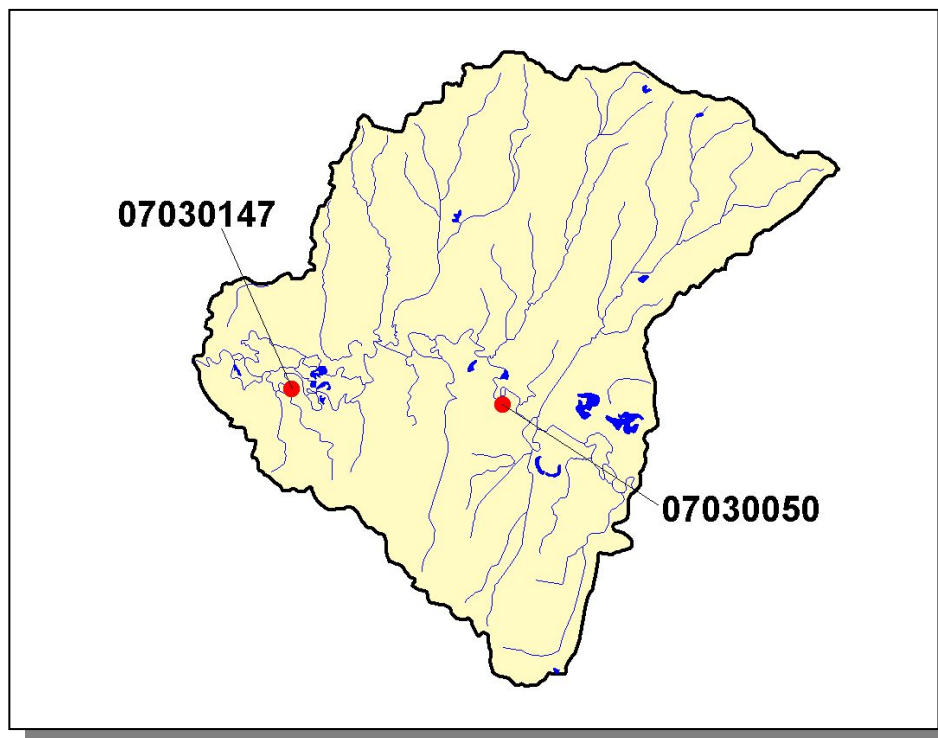


Figure 4-225. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080603. More information is provided in Appendix IV.

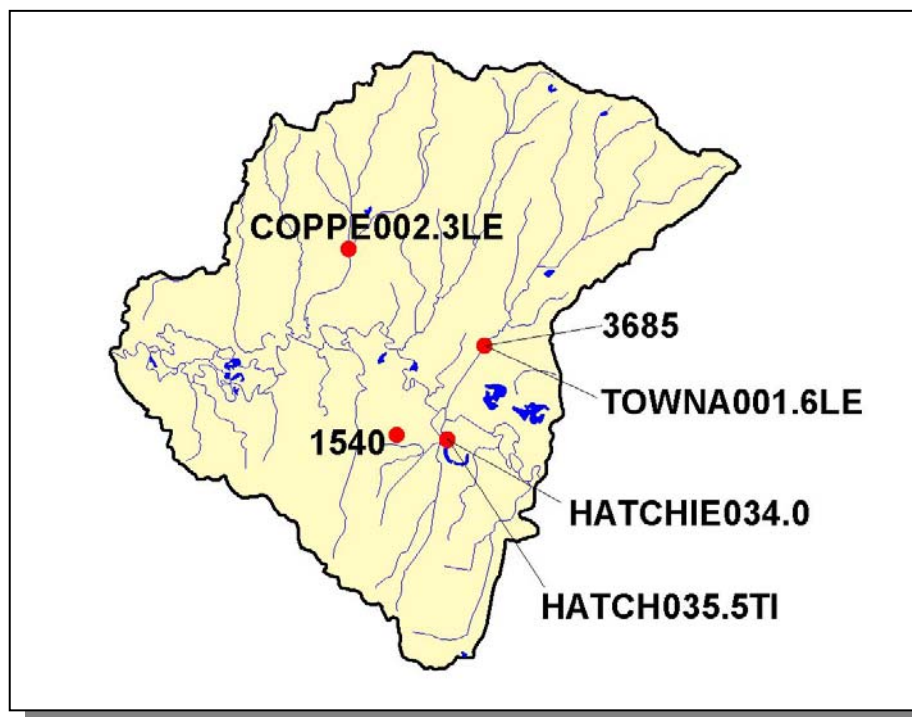


Figure 4-226. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080603. More information, including site names and locations, is provided in Appendix IV.

4.2.F.iii.a. Point Source Contributions.

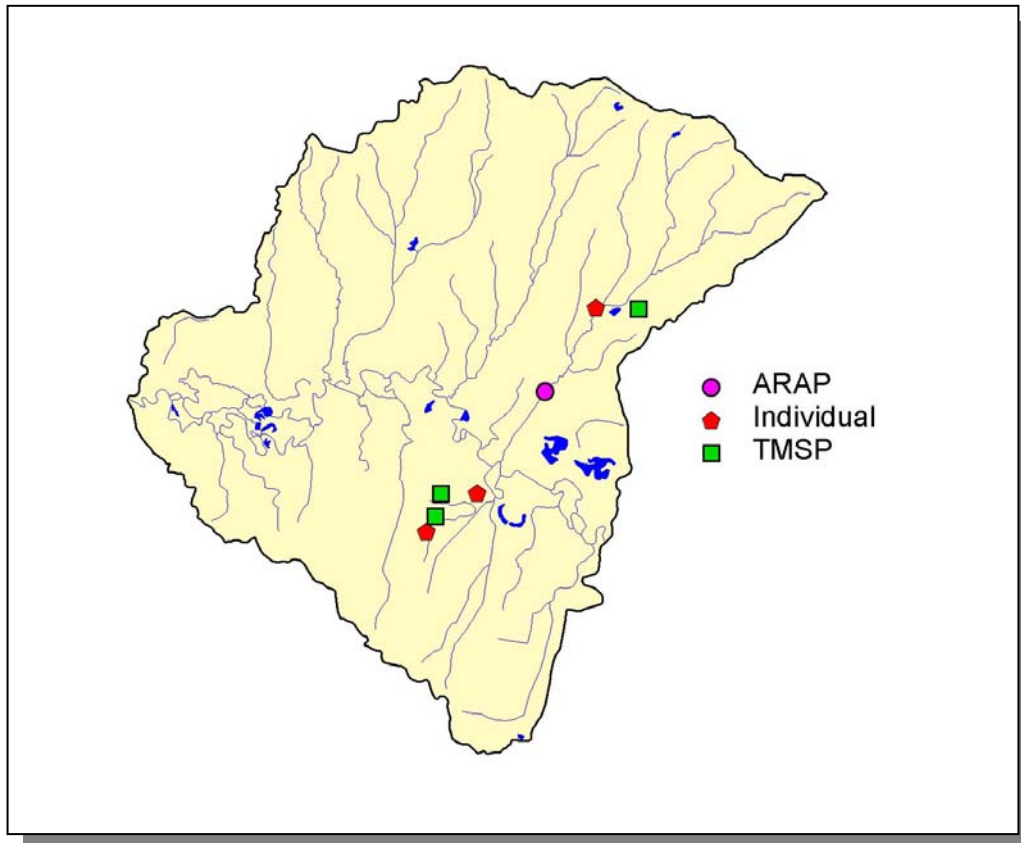


Figure 4-227. Location of Permits Issued in Subwatershed 080102080603. More information, including the names of facilities, is provided in Appendix IV.

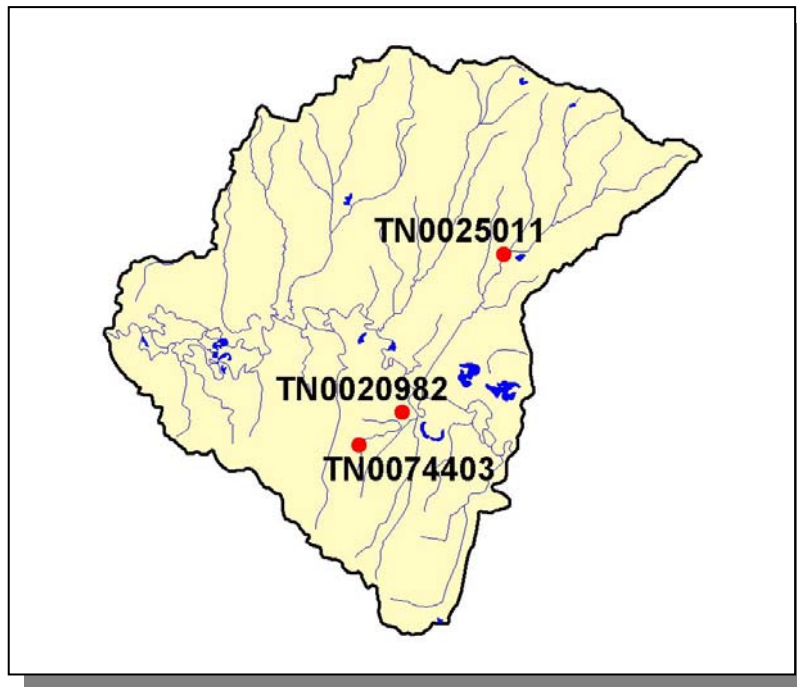


Figure 4-228. Location of Active NPDES Sites in Subwatershed 080102080603. More information, including the names of facilities, is provided in Appendix IV.

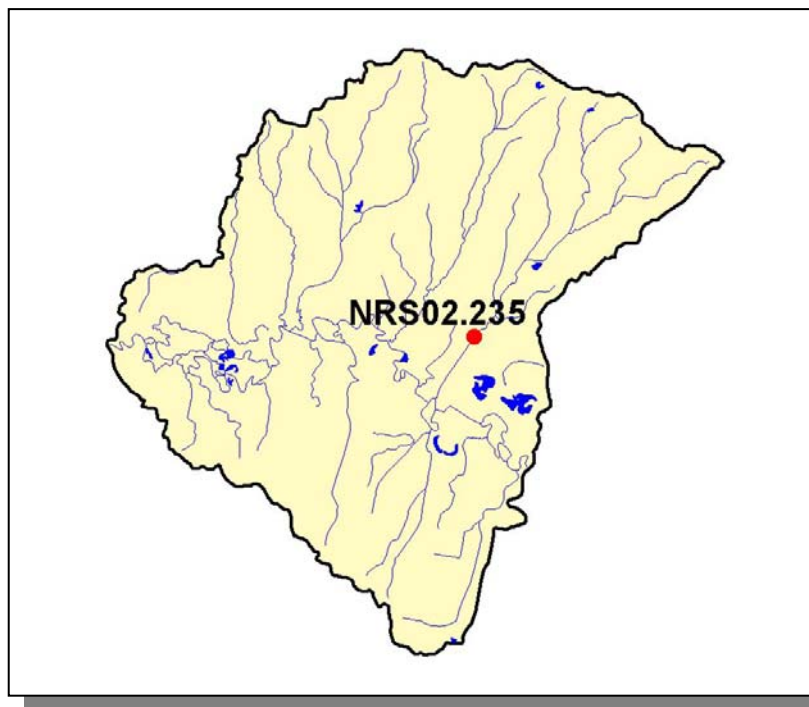


Figure 4-229. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080603. More information is provided in Appendix IV.

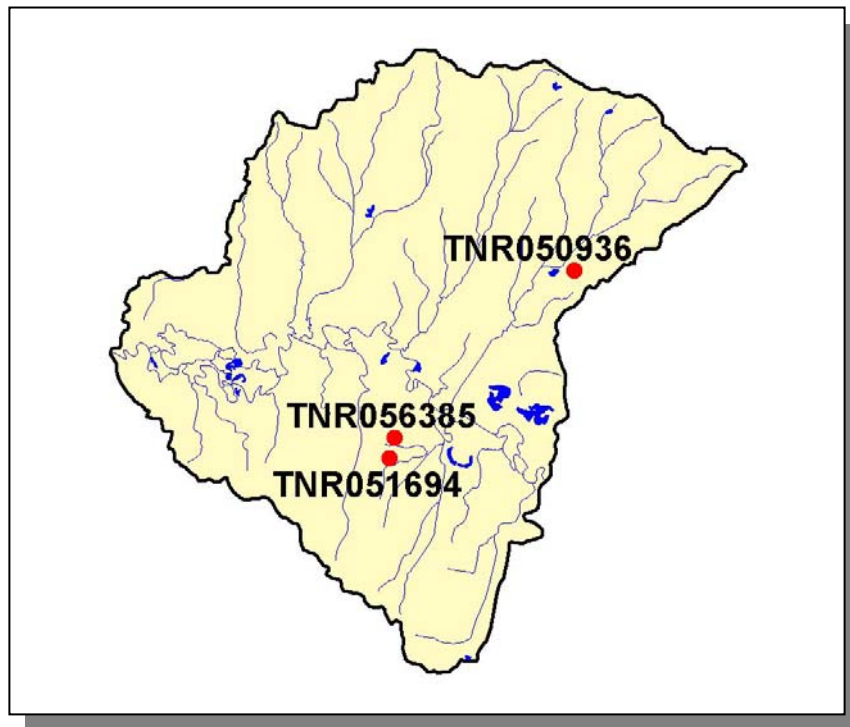


Figure 4-230. Location of TMSP Sites in Subwatershed 080102080603. More information, including the names of facilities, is provided in Appendix IV.

4.2.F.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
164	1,397	<5	304	<5

Table 4-211. Summary of Livestock Count Estimates in Subwatershed 080102080603.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Lauderdale	0	8,739	0	243	2,355	11
Tipton	5,422	9,796	14	334	251	86

Table 4-212. Summary of Livestock Count Estimates in Lauderdale and Tipton Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.78
Grass (Hayland)	0.95
Legumes, Grass (Hayland)	0.58
Legumes (Hayland)	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.93
Corn (Row Crops)	14.77
Cotton (Row Crops)	14.57
Soybeans (Row Crops)	15.28
Wheat (Close-Grown Cropland)	9.27
Other Vegetable and Truck Crops	9.91
Summer Fallow (Other Cropland)	8.70
Other Cropland not Planted	0.22
Conservation Reserve Program Lands	1.54
Other Land in Farms	0.05
Farmsteads and Ranch Headquarters	0.29

Table 4-213. Annual Estimated Total Soil Loss in Subwatershed 080102080603.

4.2.F.iv. 080102080604 (Town Creek).

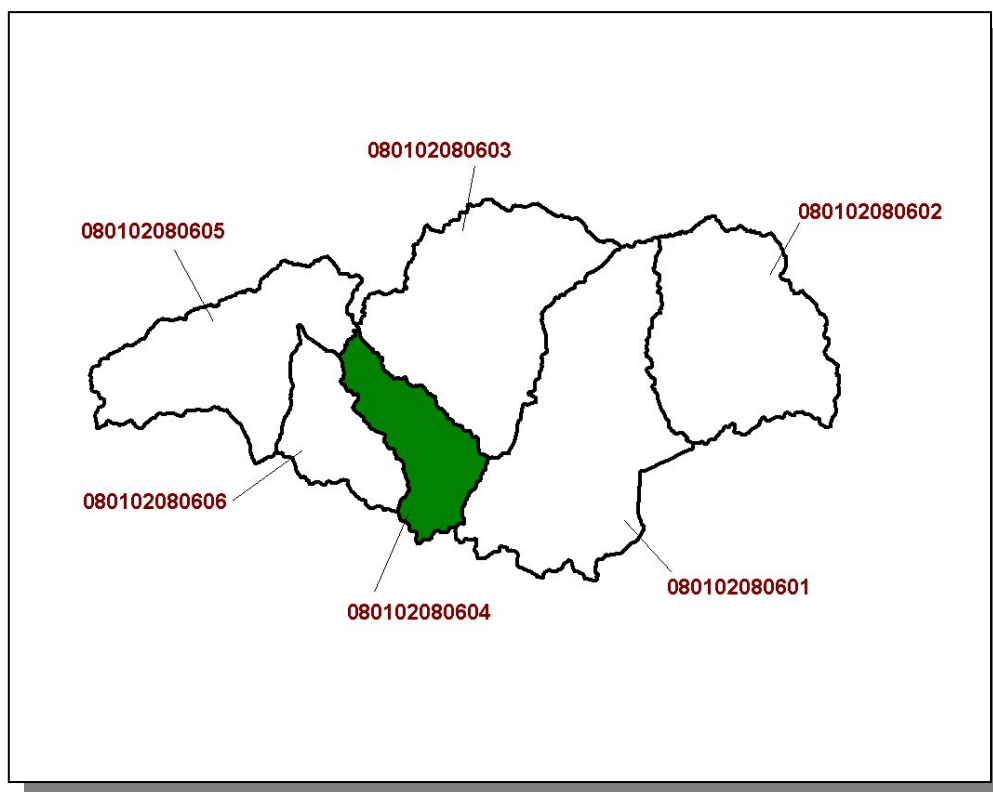


Figure 4-231. Location of Subwatershed 080102080604. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

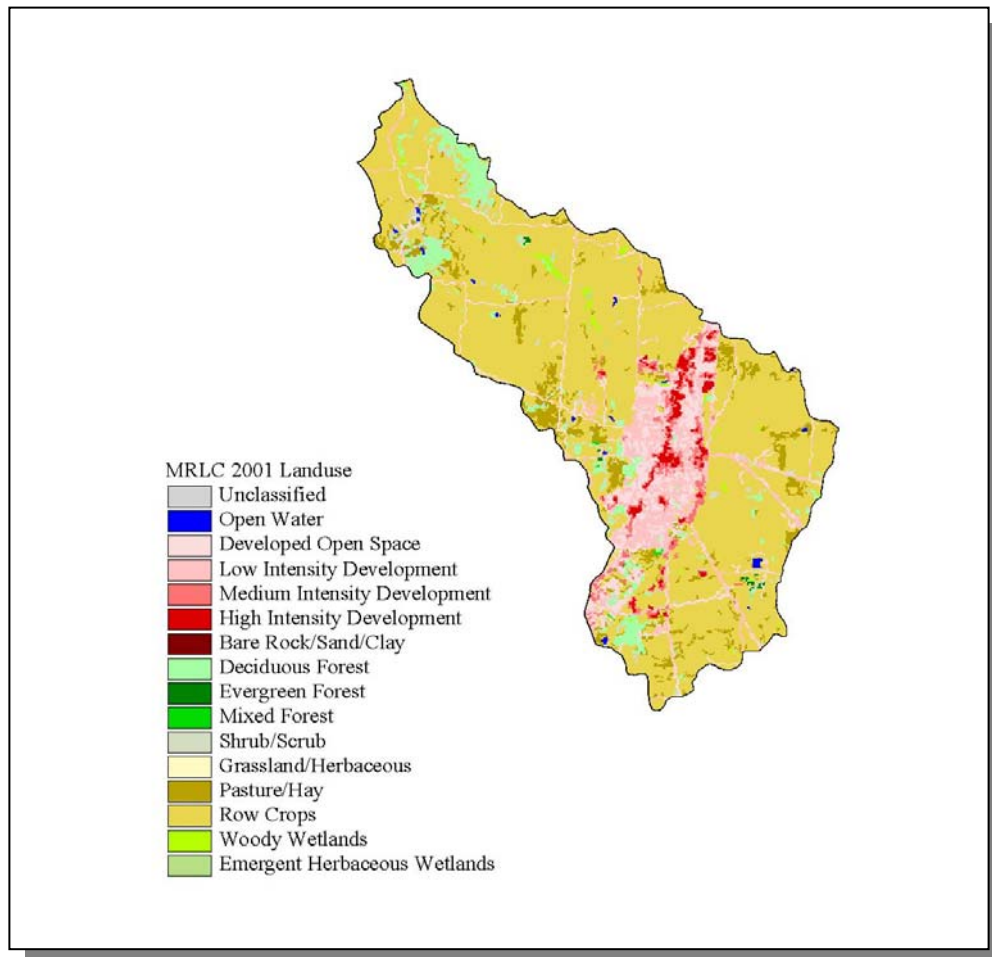


Figure 4-232. Illustration of Land Use Distribution in Subwatershed 080102080604.

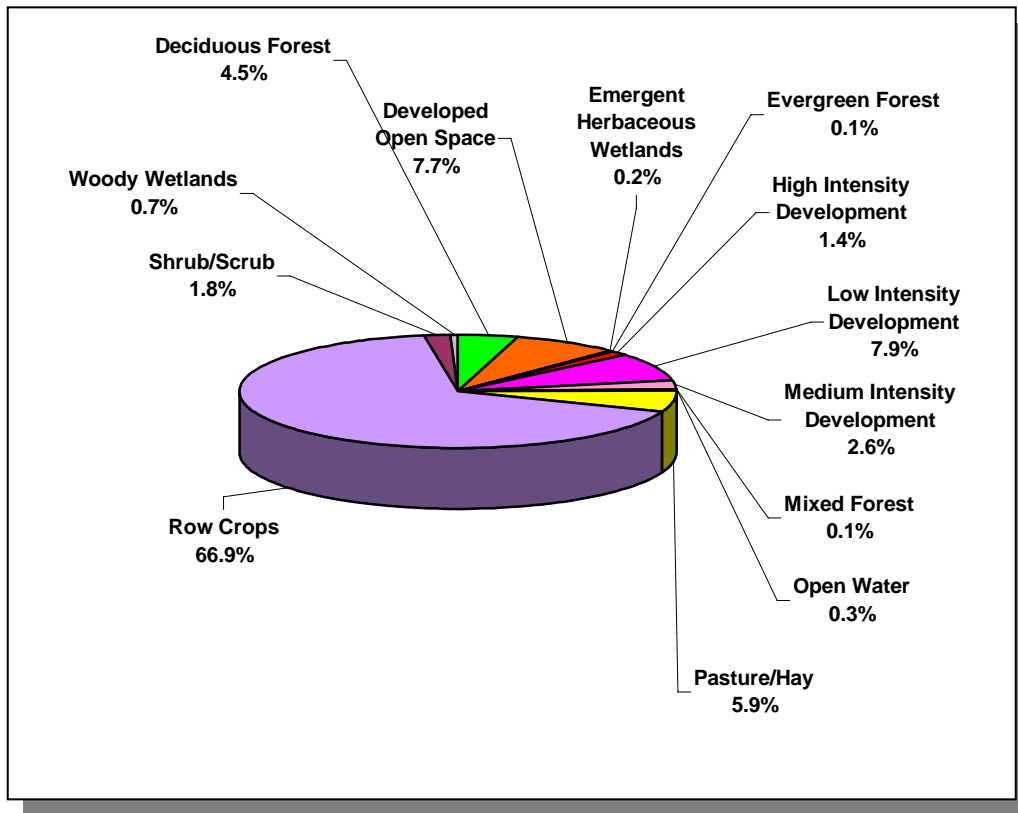


Figure 4-233. Land Use Distribution in Subwatershed 080102080604. More information is provided in Appendix IV.

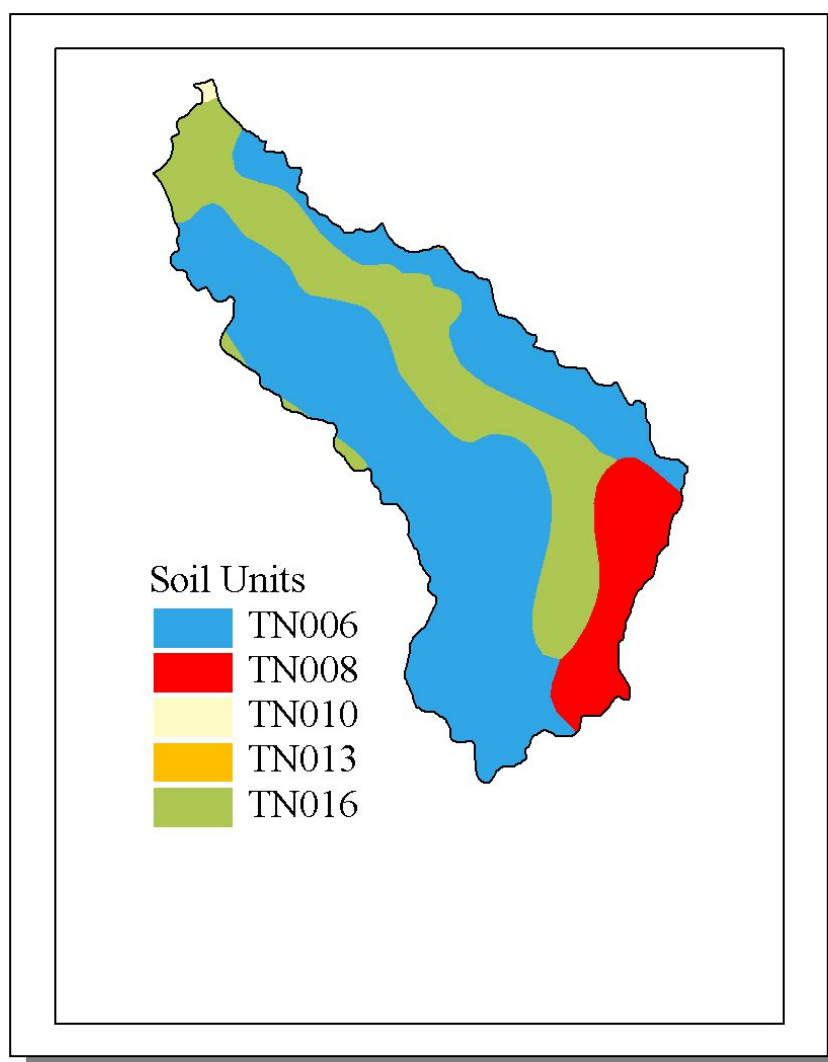


Figure 4-234. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080604.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-214. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080604. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Tipton	37,568	45,986	51,271	4.84	1,818	2,225	2,481	36.5

Table 4-215. Population Estimates in Subwatershed 080102080604

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Covington	Tipton	7,487	2,920	2,717	203	0

Table 4-216. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080604.

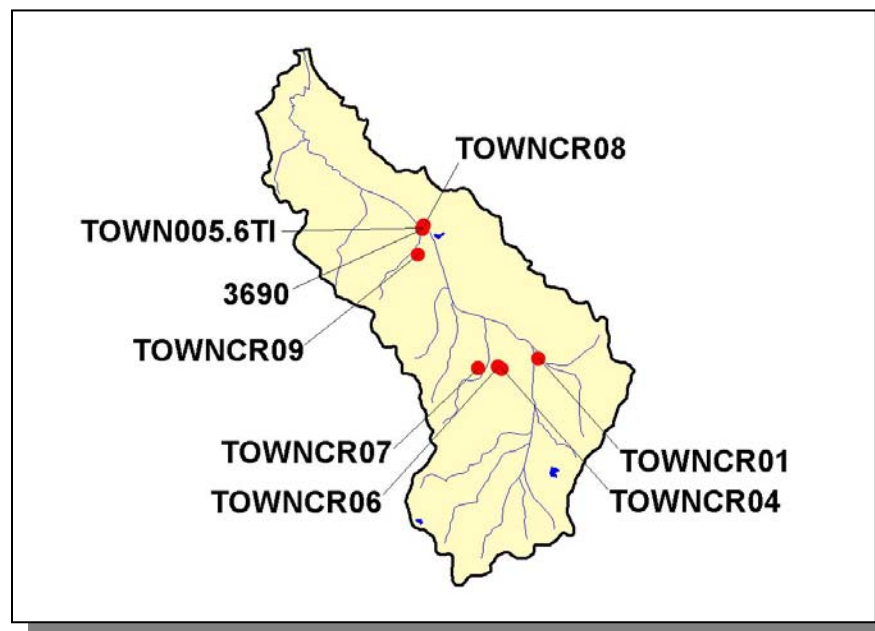


Figure 4-235. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080604. More information, including site names and locations, is provided in Appendix IV.

4.2.F.iv.a. Point Source Contributions.

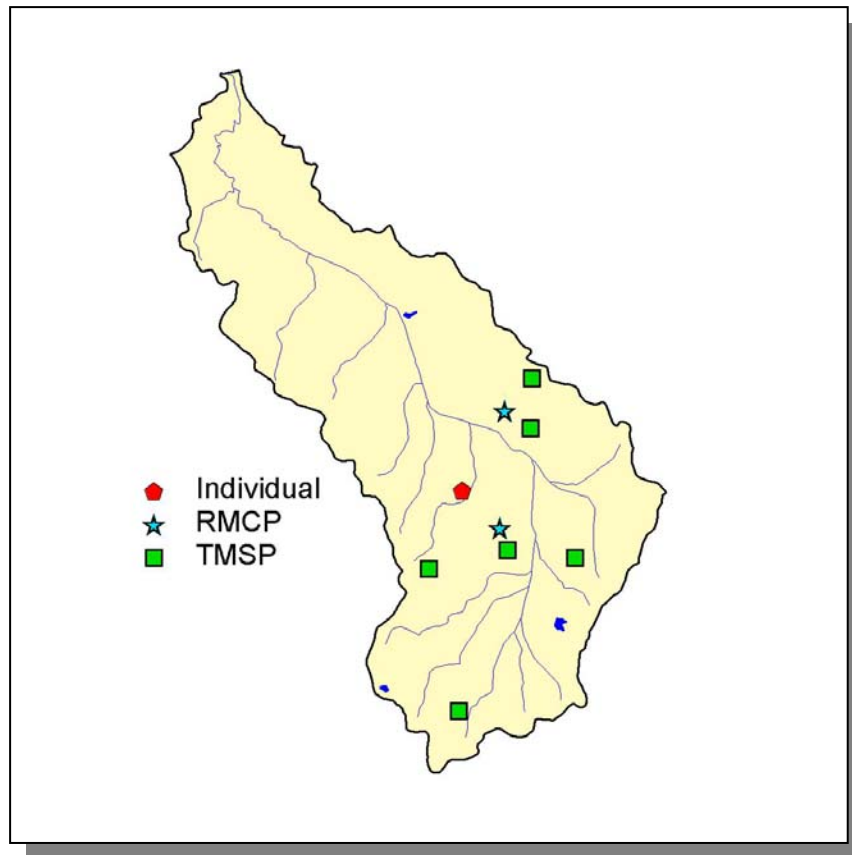


Figure 4-236. Location of Permits Issued in Subwatershed 080102080604. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-237. Location of Active NPDES Sites in Subwatershed 080102080604. More information, including the names of facilities, is provided in Appendix IV.

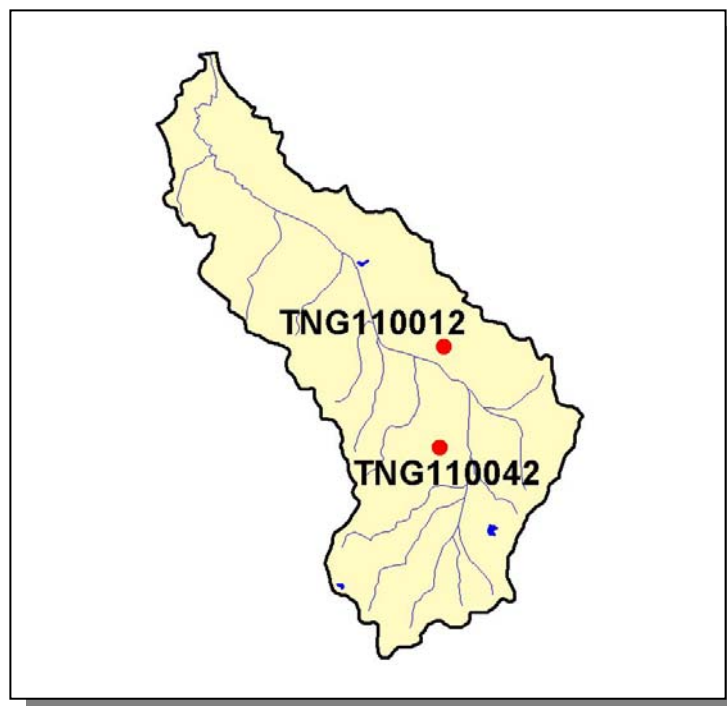


Figure 4-238. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 080102080604. More information is provided in Appendix IV.

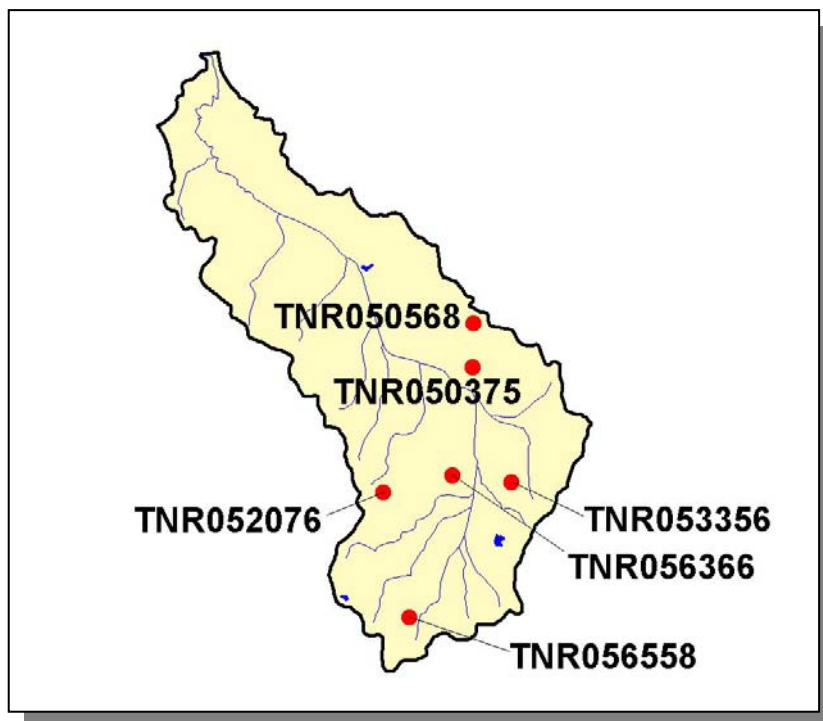


Figure 4-239. Location of TMSP Sites in Subwatershed 080102080604. More information, including the names of facilities, is provided in Appendix IV.

4.2.F.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
328	593	<5	<5	15	5

Table 4-217. Summary of Livestock Count Estimates in Subwatershed 080102080604. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Tipton	5,422	9,796	14	334	251	86

Table 4-218. Summary of Livestock Count Estimates in Tipton County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Tipton	50.9	50.9	1.0	5.6

Table 4-219. Forest Acreage and Annual Removal Rates (1987-1994) in Tipton County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.84
Grass (Hayland)	2.09
Legumes (Hayland)	0.54
Grass, Forbs, Legumes (Mixed Pasture)	1.01
Cotton (Row Crops)	16.59
Soybeans (Row Crops)	18.74
Other Vegetable and Truck Crops	21.48
Other Cropland not Planted	0.22
Conservation Reserve Program Lands	1.05
Farmsteads and Ranch Headquarters	0.69

Table 4-220. Annual Estimated Total Soil Loss in Subwatershed 080102080604.

4.2.F.v. 080102080605 (Hatchie River).

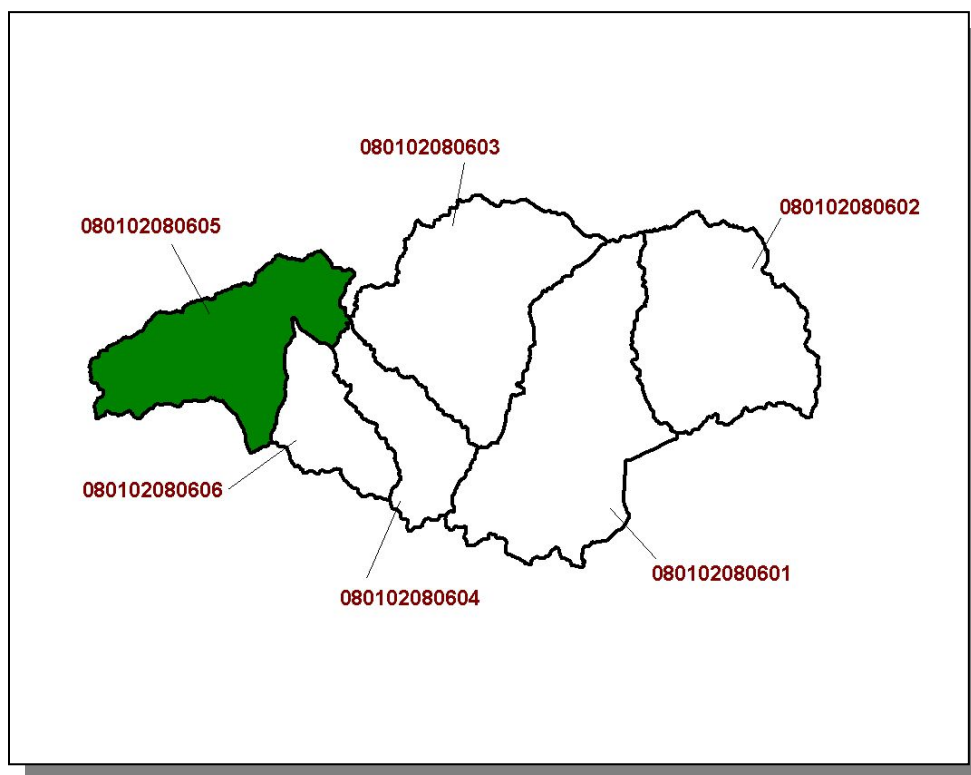


Figure 4-240. Location of Subwatershed 080102080605. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

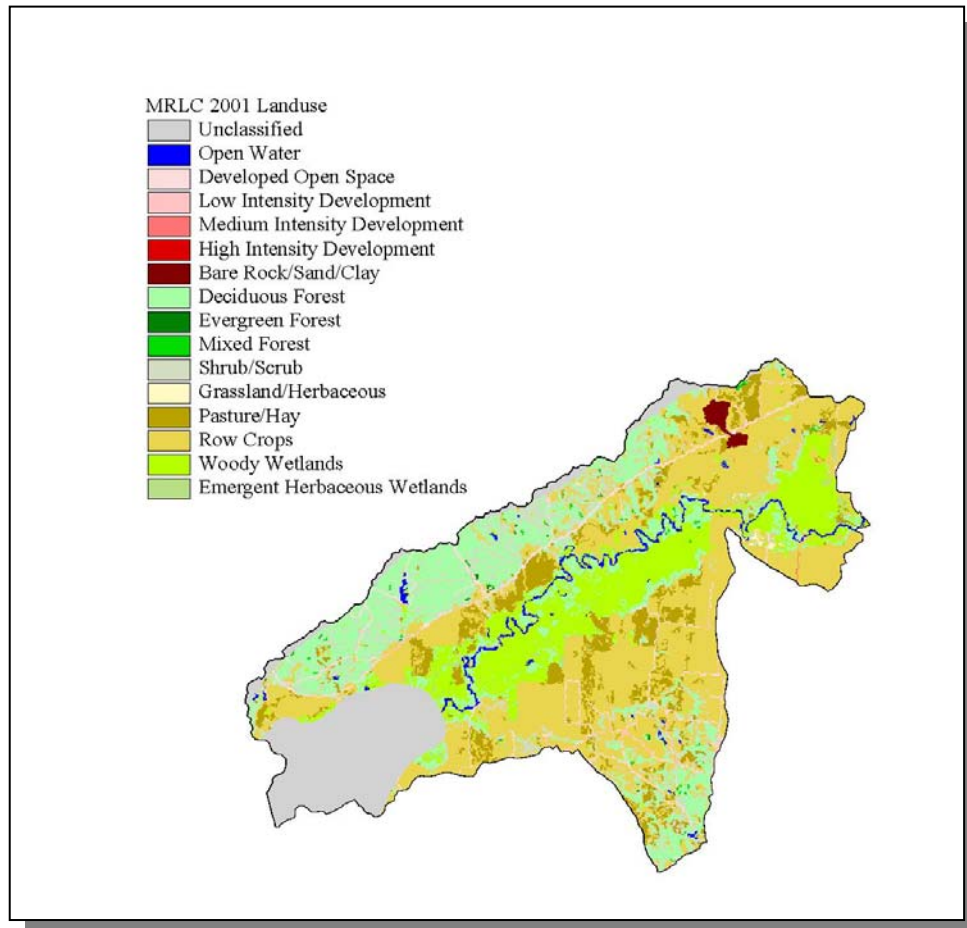


Figure 4-241. Illustration of Land Use Distribution in Subwatershed 080102080605.

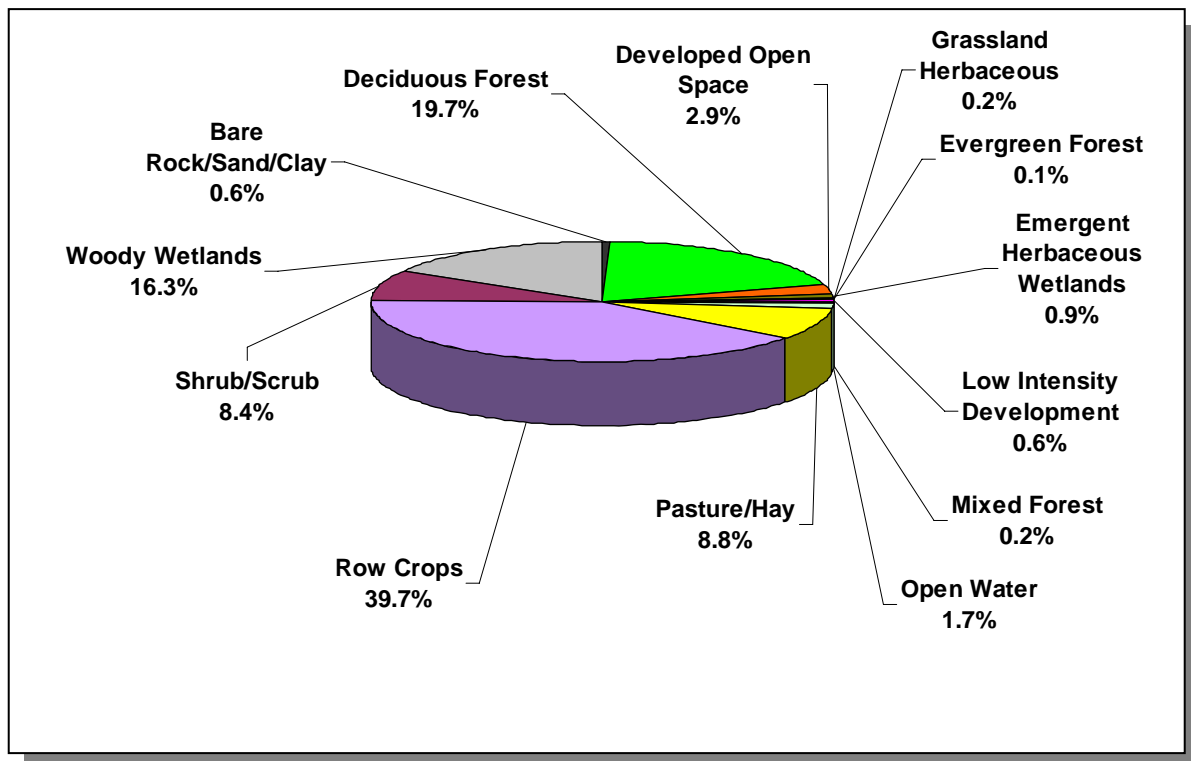


Figure 4-242. Land Use Distribution in Subwatershed 080102080605. More information is provided in Appendix IV.

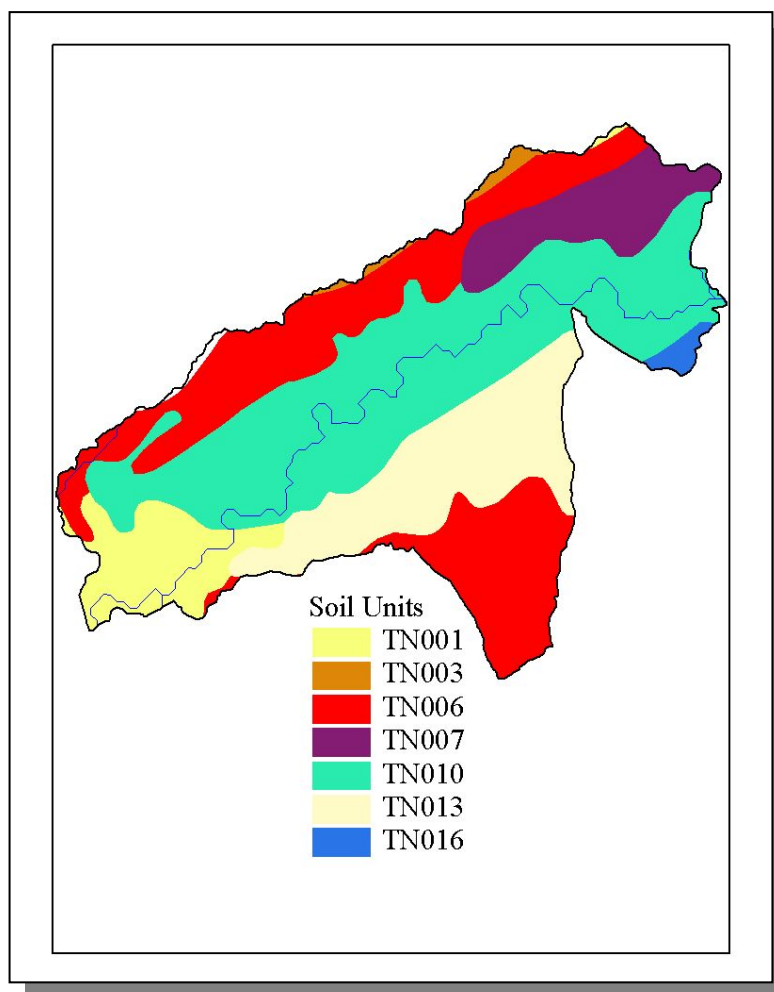


Figure 4-243. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080605.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN001	14.00	C	2.31	7.00	Silty Loam	0.33
TN003	62.00	C	0.50	6.65	Silty Clay	0.33
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-221. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080605. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Lauderdale	23,491	24,128	27,101	4.77	1,120	1,151	1,292	15.4
Tipton	37,568	45,986	51,271	4.43	1,666	2,039	2,274	36.5
Total	61,059	70,114	78,372		2,786	3,190	3,566	28.0

Table 4-222. Population Estimates in Subwatershed 080102080605

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Burlison	Tipton	364	165	14	138	13
Garland	Tipton	181	77	13	59	5
Total		545	242	27	197	18

Table 4-223. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080605.

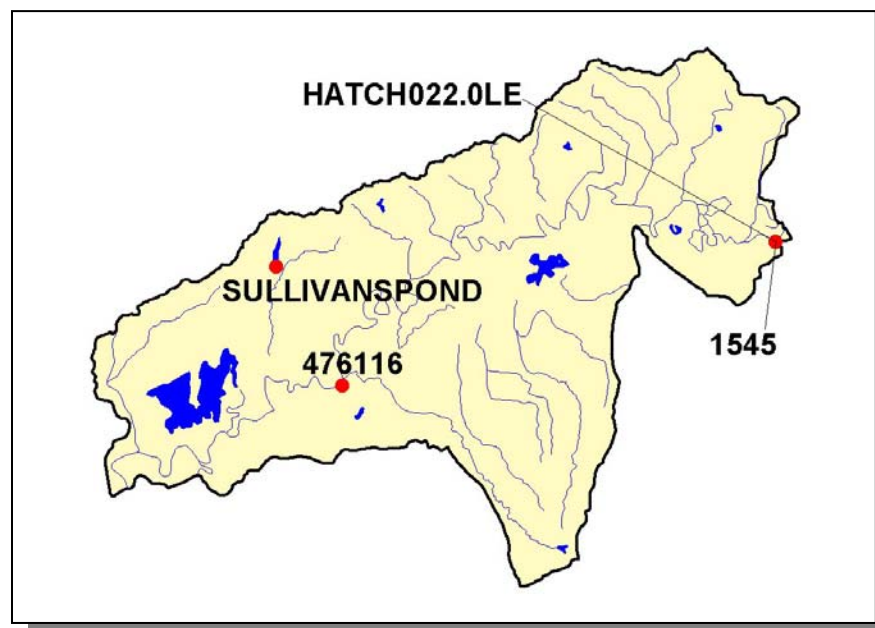


Figure 4-244. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080605. More information, including site names and locations, is provided in Appendix IV.

4.2.F.v.a. Point Source Contributions.

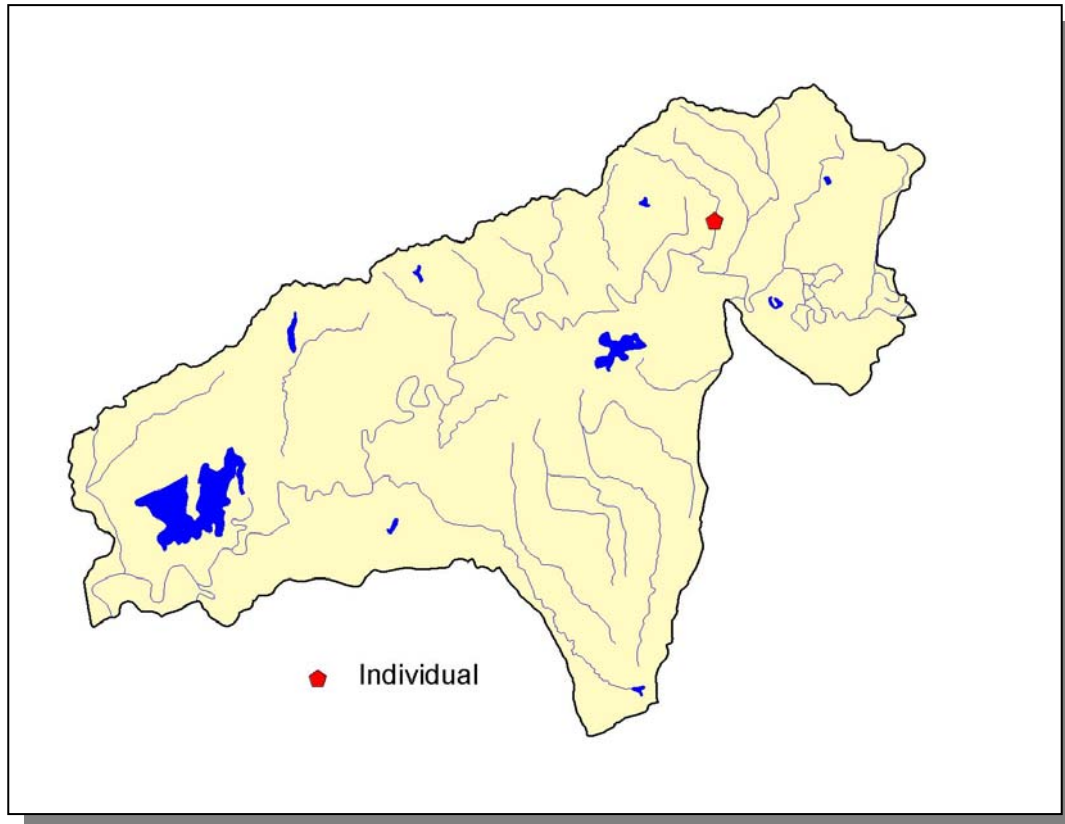


Figure 4-245. Location of Permits Issued in Subwatershed 080102080605. More information, including the names of facilities, is provided in Appendix IV.

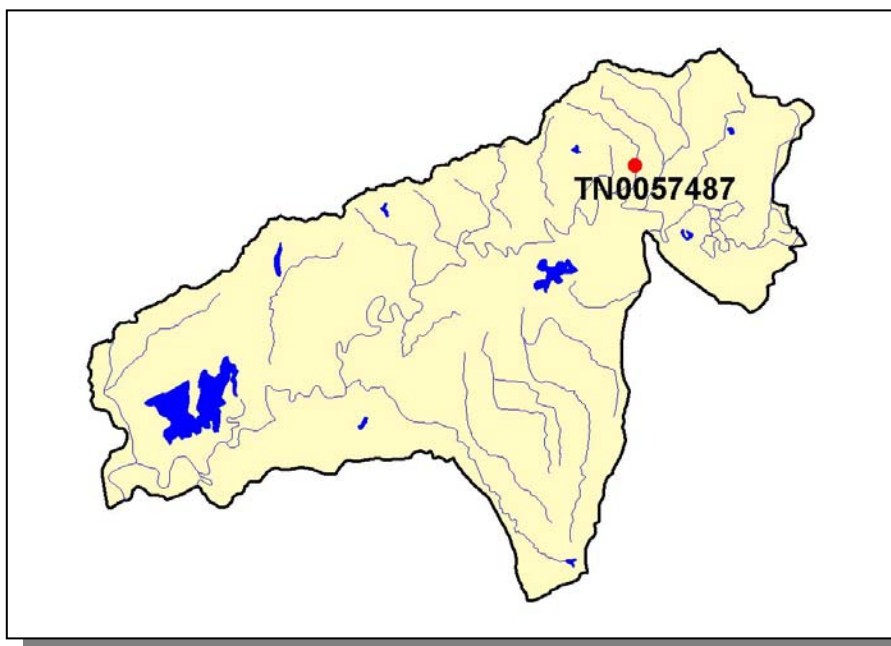


Figure 4-246. Location of Active NPDES Sites in Subwatershed 080102080605. More information, including the names of facilities, is provided in Appendix IV.

4.2.F.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
169	703	<5	115	<5

Table 4-224. Summary of Livestock Count Estimates in Subwatershed 080102080605.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Lauderdale	0	8,739	0	243	2,355	11
Tipton	5,422	9,796	14	334	251	86

Table 4-225. Summary of Livestock Count Estimates in Lauderdale and Tipton Counties.
According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.62
Grass (Hayland)	1.14
Legumes, Grass (Hayland)	0.58
Legumes (Hayland)	0.60
Grass, Forbs, Legumes (Mixed Pasture)	1.78
Corn (Row Crops)	14.77
Cotton (Row Crops)	14.91
Soybeans (Row Crops)	15.87
Wheat (Close-Grown Cropland)	9.27
Other Vegetable and Truck Crops	11.87
Summer Fallow (Other Cropland)	8.70
Other Cropland not Planted	0.22
Conservation Reserve Program Lands	1.45
Other Land in Farms	0.05
Farmsteads and Ranch Headquarters	0.36

Table 4-226. Annual Estimated Total Soil Loss in Subwatershed 080102080605.

4.2.F.vi. 080102080606 (Mathis Creek).

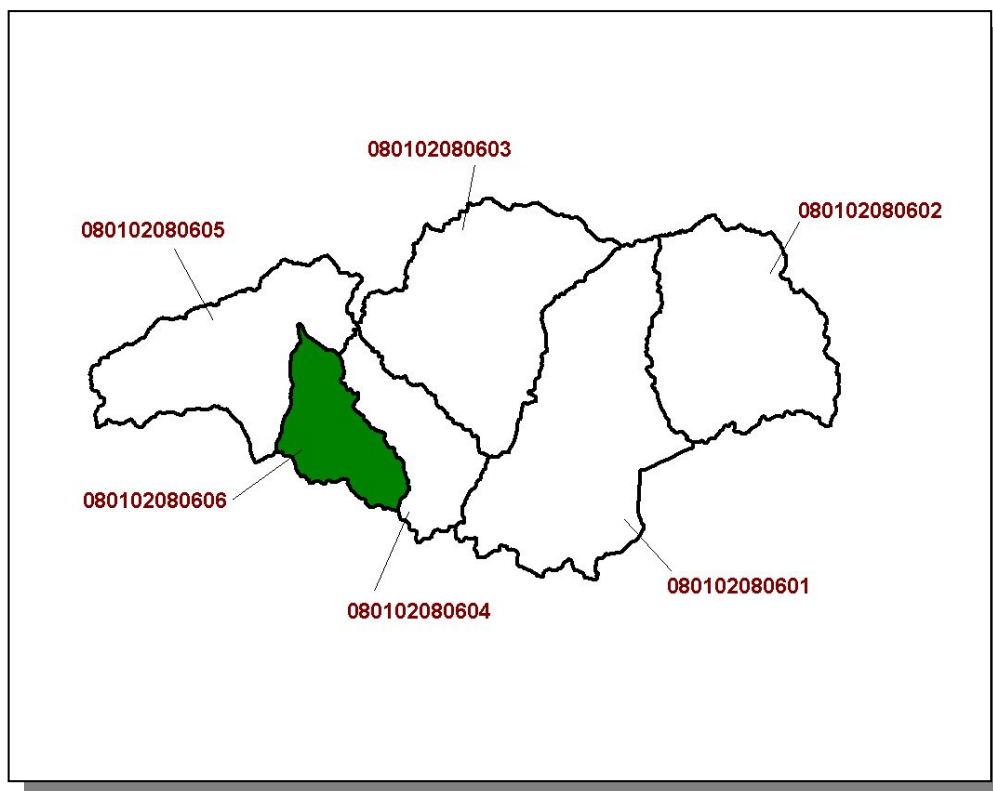


Figure 4-247. Location of Subwatershed 080102080606. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

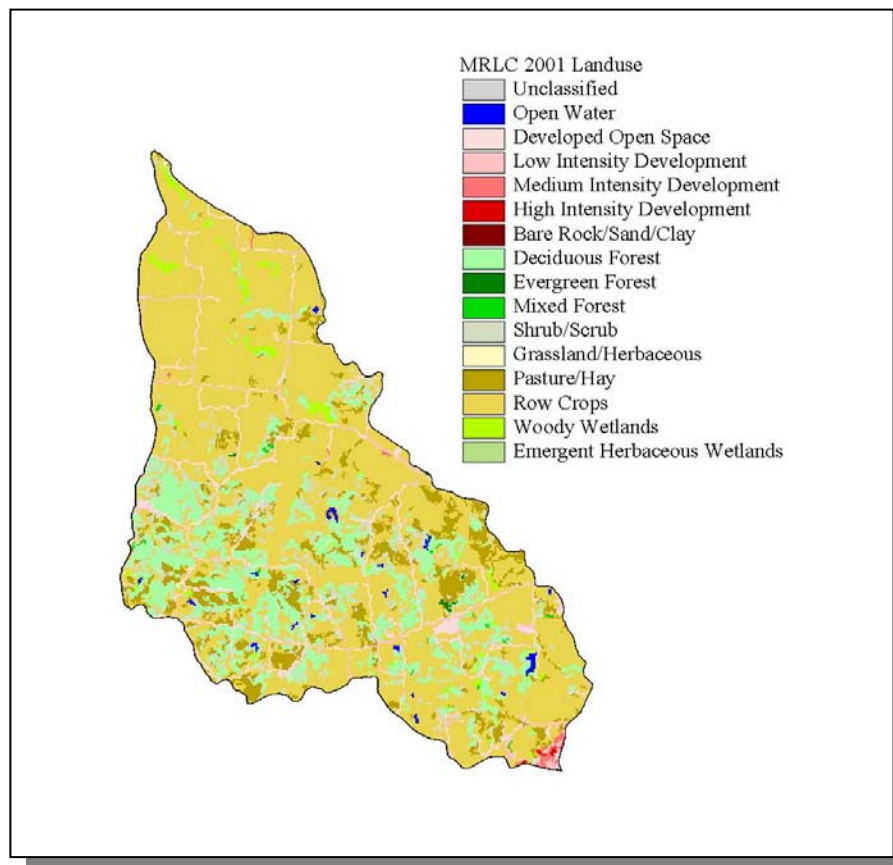


Figure 4-248. Illustration of Land Use Distribution in Subwatershed 080102080606.

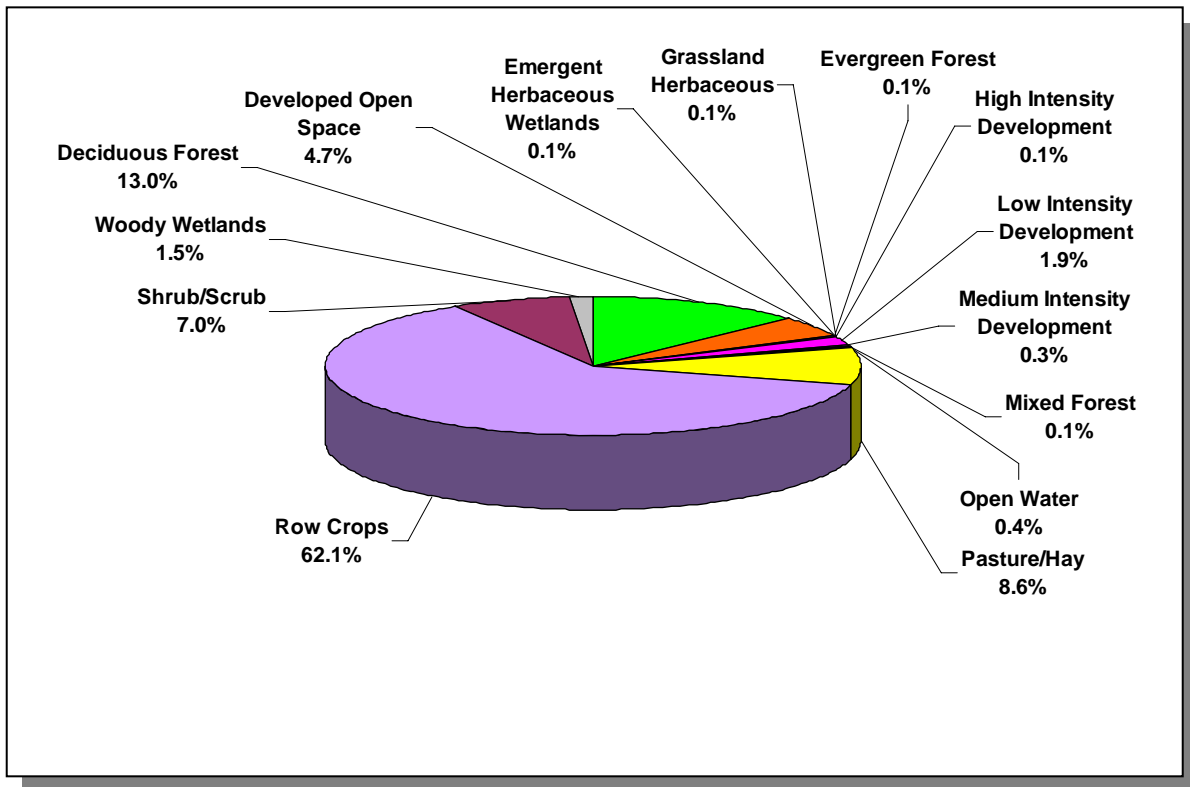


Figure 4-249. Land Use Distribution in Subwatershed 080102080606. More information is provided in Appendix IV.

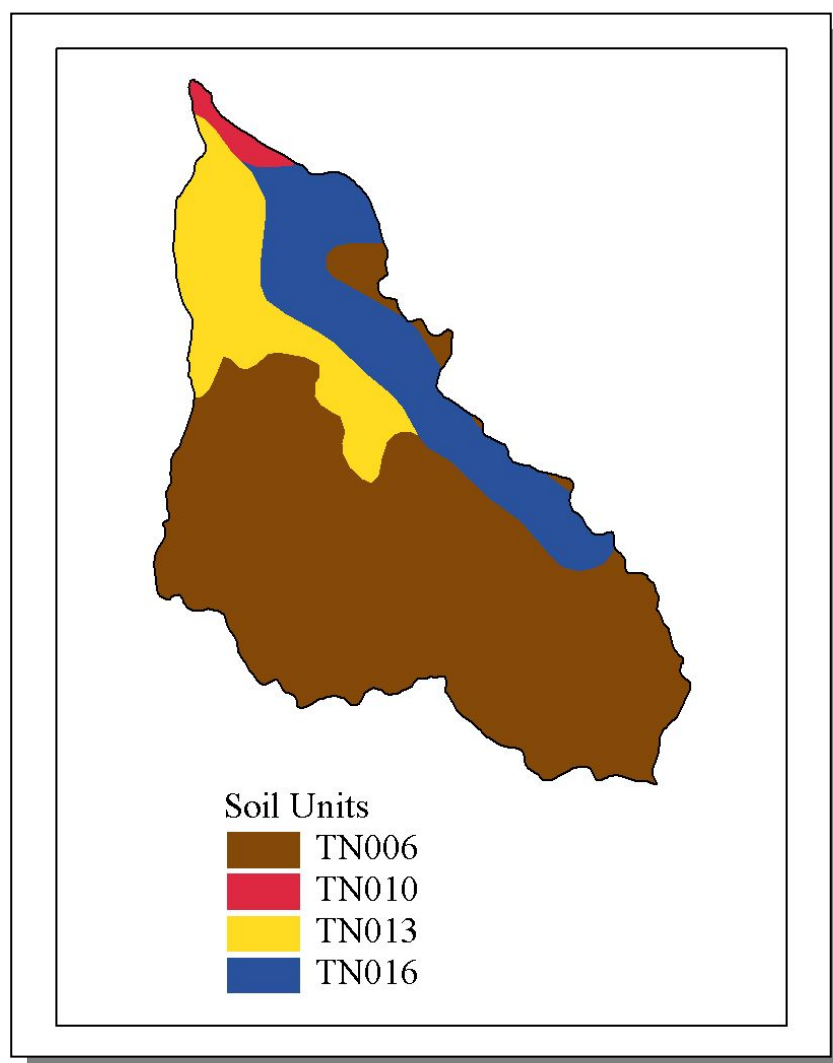


Figure 4-250. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080606.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN013	72.00	C	1.30	5.44	Silty Loam	0.46
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-227. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080606. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Tipton	37,568	45,986	51,271	4.42	1,659	2,031	2,264	36.5

Table 4-228. Population Estimates in Subwatershed 080102080606

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Covington	Tipton	7,487	2,920	2,717	203	0
Garland	Tipton	181	77	13	59	5
Total		7,668	7,997	2,730	262	5

Table 4-229. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080606.

4.2.F.vi.a. Point Source Contributions.

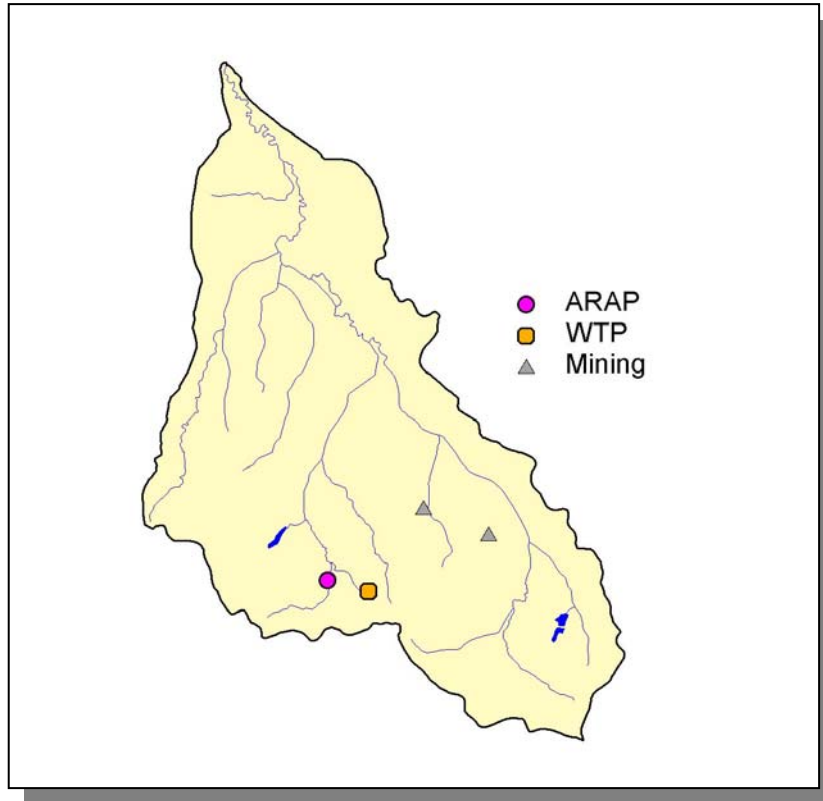


Figure 4-251. Location of Permits Issued in Subwatershed 080102080606. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-252. Location of Active Mining Sites in Subwatershed 080102080606. More information, including the names of mining operations, is provided in Appendix IV.



Figure 4-253. Location of Water Treatment Plants in Subwatershed 080102080606. More information, including the names of facilities, is provided in Appendix IV.

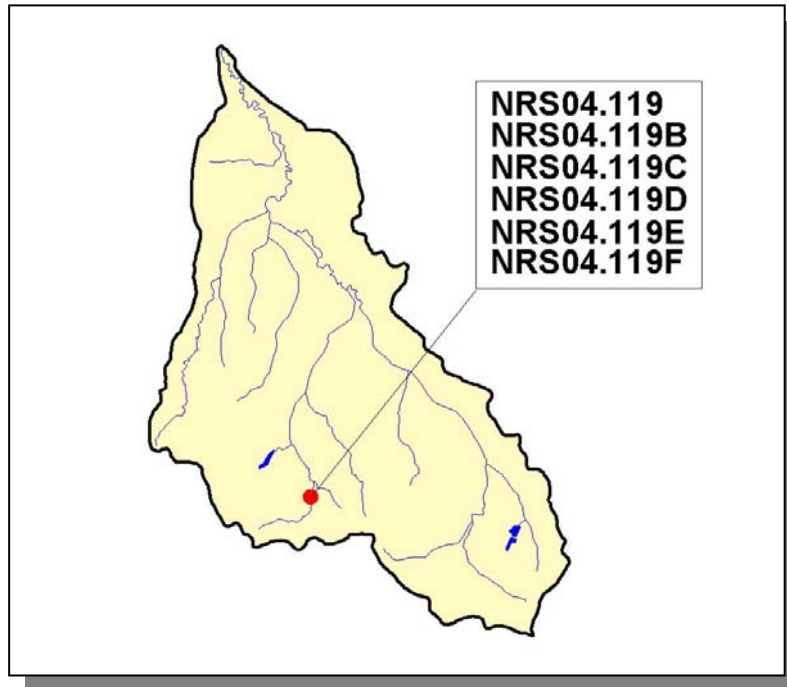


Figure 4-254. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080606. More information is provided in Appendix IV.

4.2.F.vi.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
396	715	<5	<5	18	6

Table 4-230. Summary of Livestock Count Estimates in Subwatershed 080102080606. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Tipton	5,422	9,796	14	334	251	86

Table 4-231. Summary of Livestock Count Estimates in Tipton County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Tipton	50.9	50.9	1.0	5.6

Table 4-232. Forest Acreage and Annual Removal Rates (1987-1994) in Tipton County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.84
Grass (Hayland)	2.09
Legumes (Hayland)	0.54
Grass, Forbs, Legumes (Mixed Pasture)	1.01
Cotton (Row Crops)	16.59
Soybeans (Row Crops)	18.74
Other Vegetable and Truck Crops	21.48
Other Cropland not Planted	0.22
Conservation Reserve Program Lands	1.05
Farmsteads and Ranch Headquarters	0.69

Table 4-233. Annual Estimated Total Soil Loss in Subwatershed 080102080606.

4.2.G. 0801020807.

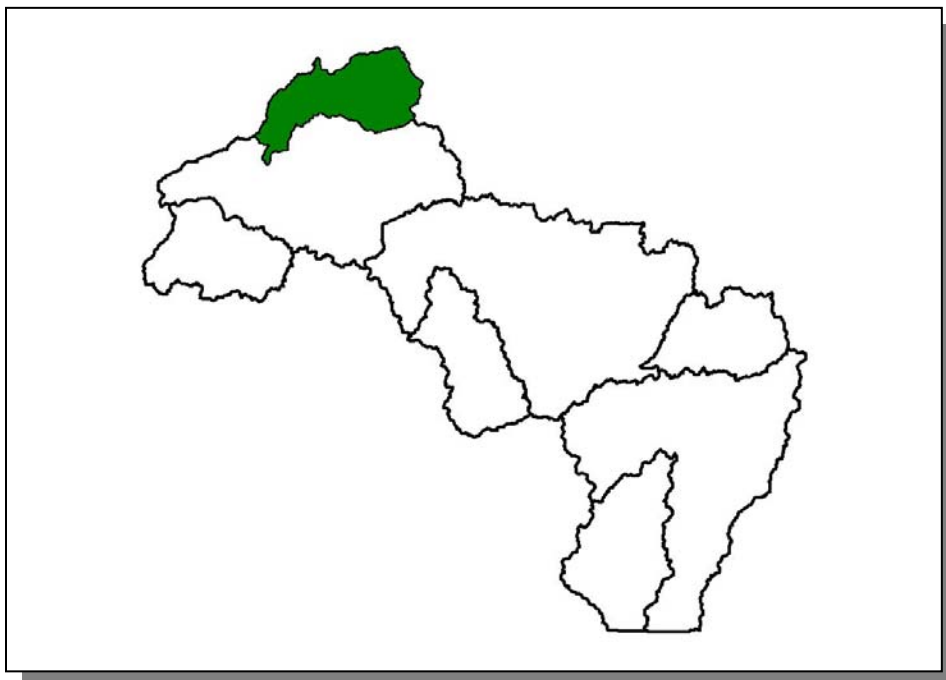


Figure 4-255. Location of Subwatershed 0801020807. All Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.G.i. 080102080701 (Upper Cane Creek).

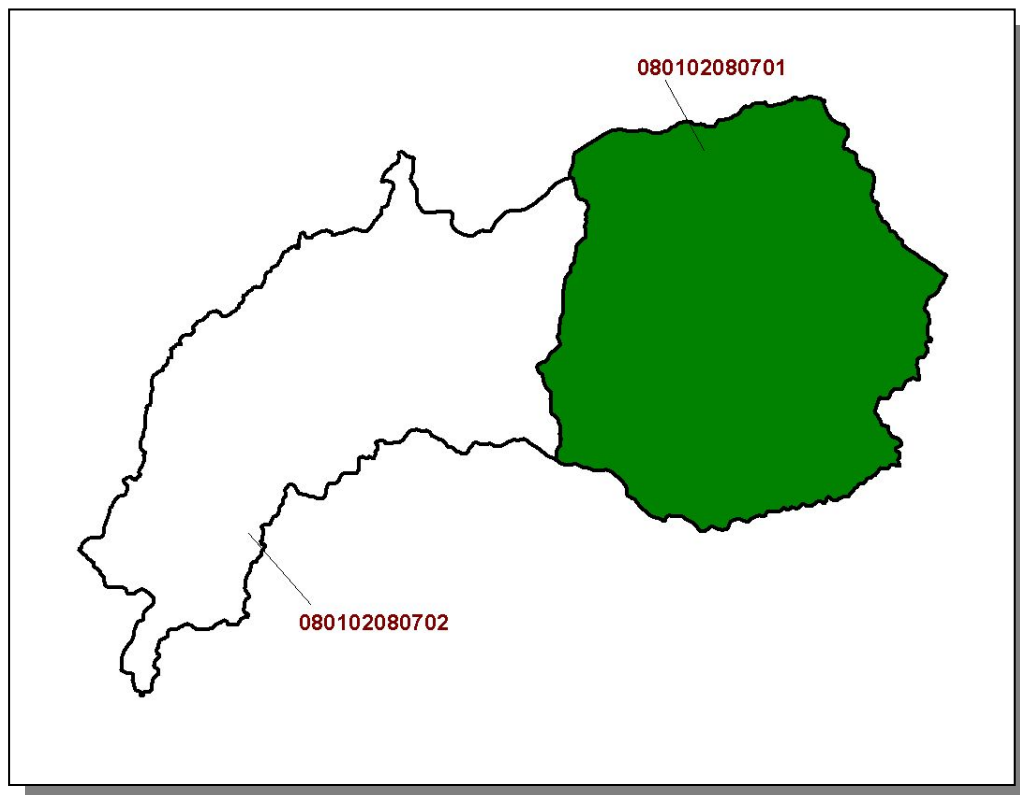


Figure 4-256. Location of Subwatershed 080102080701. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

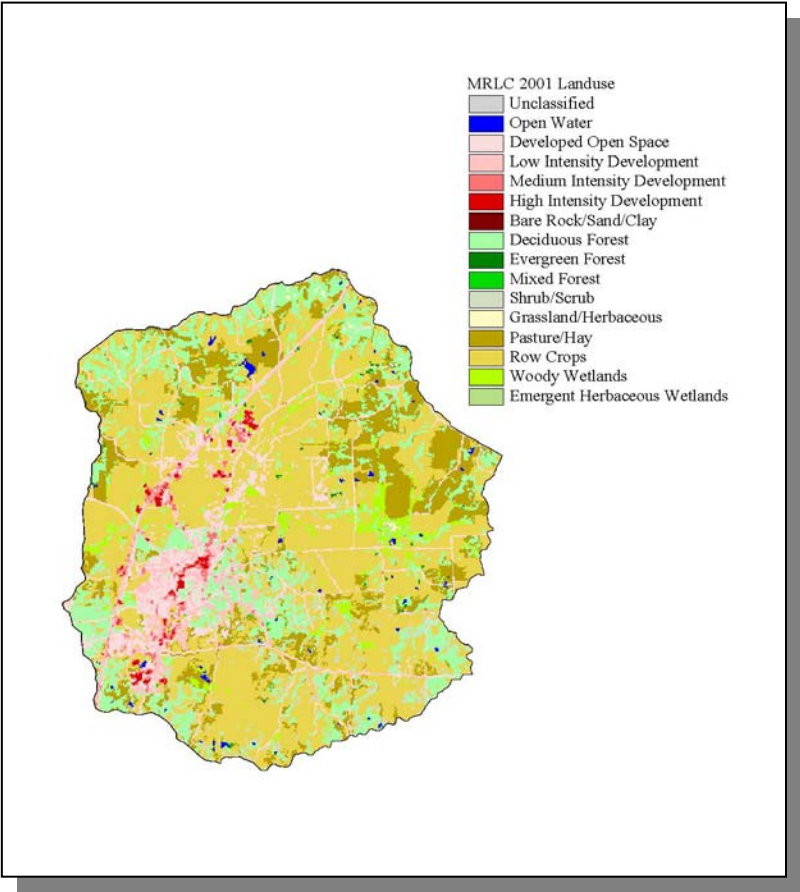


Figure 4-257. Illustration of Land Use Distribution in Subwatershed 080102080701.

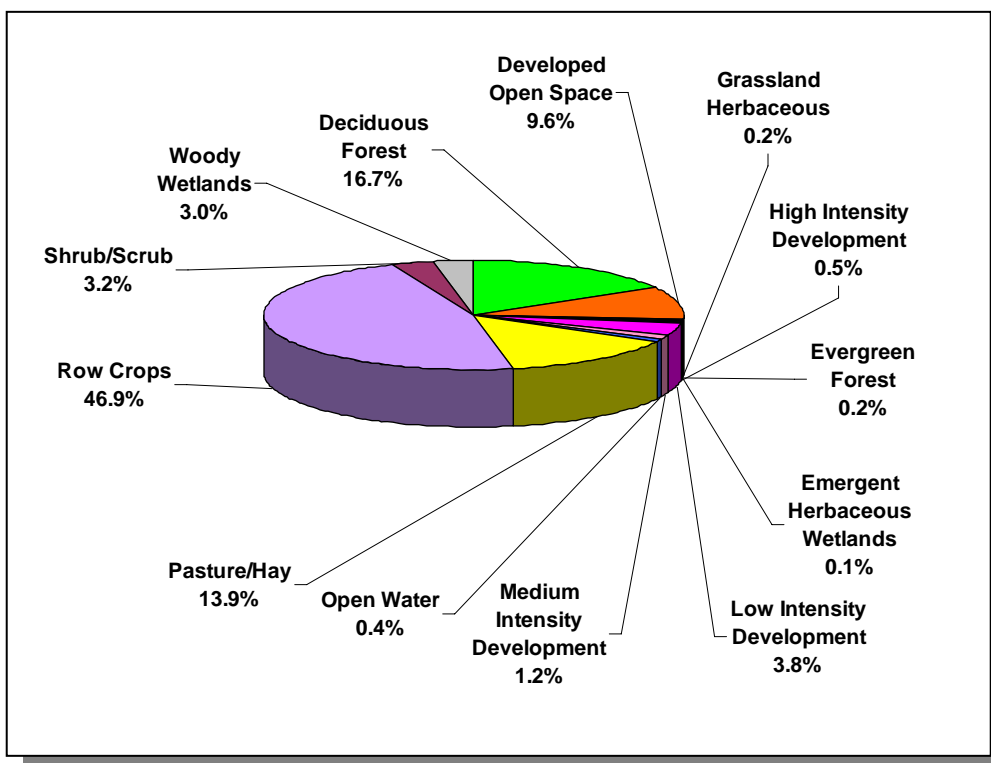


Figure 4-258. Land Use Distribution in Subwatershed 080102080701. More information is provided in Appendix IV.

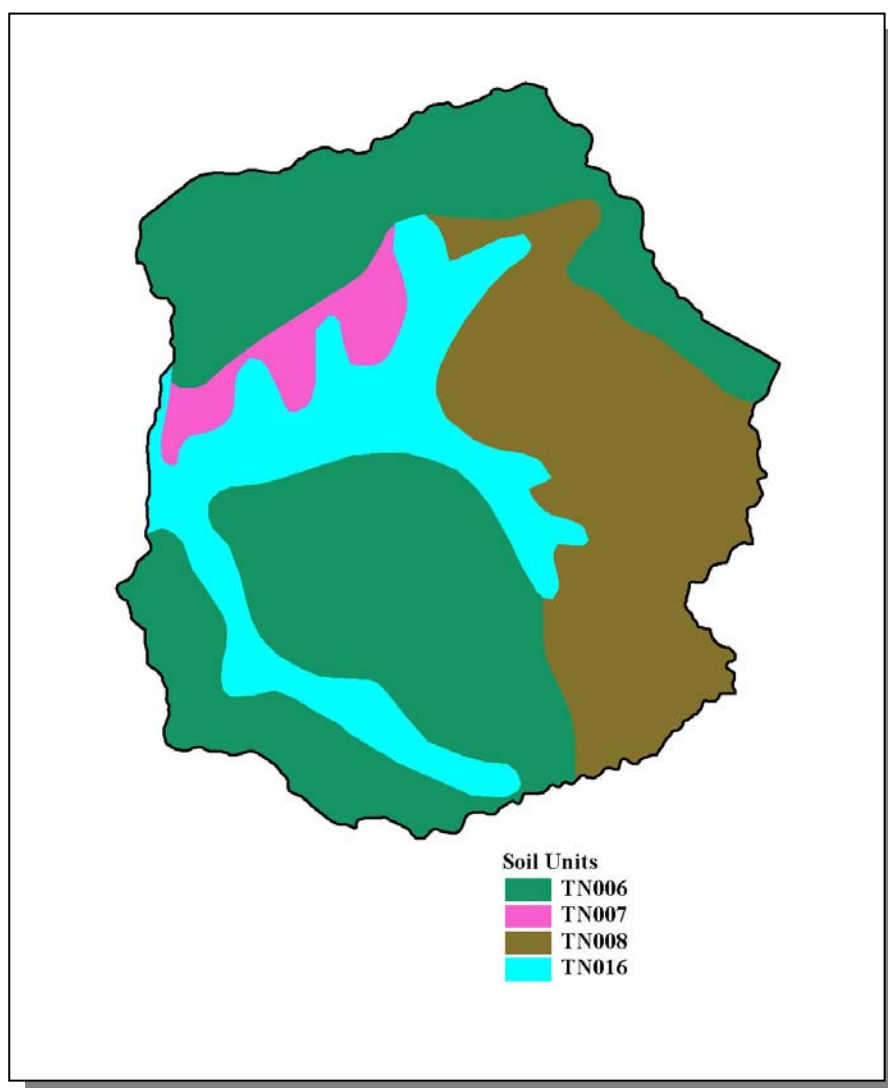


Figure 4-259. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080701.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-234. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080701. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Haywood	19,437	19,709	19,797	0.08	15	15	15	0.0
Lauderdale	23,491	24,128	27,101	9.07	2,130	2,188	2,457	15.4
Total	42,928	43,837	46,898		2,145	2,203	2,472	15.2

Table 4-235. Population Estimates in Subwatershed 080102080701.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Ripley	Lauderdale	6,188	2,490	2,420	51	19

Table 4-236. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080701.

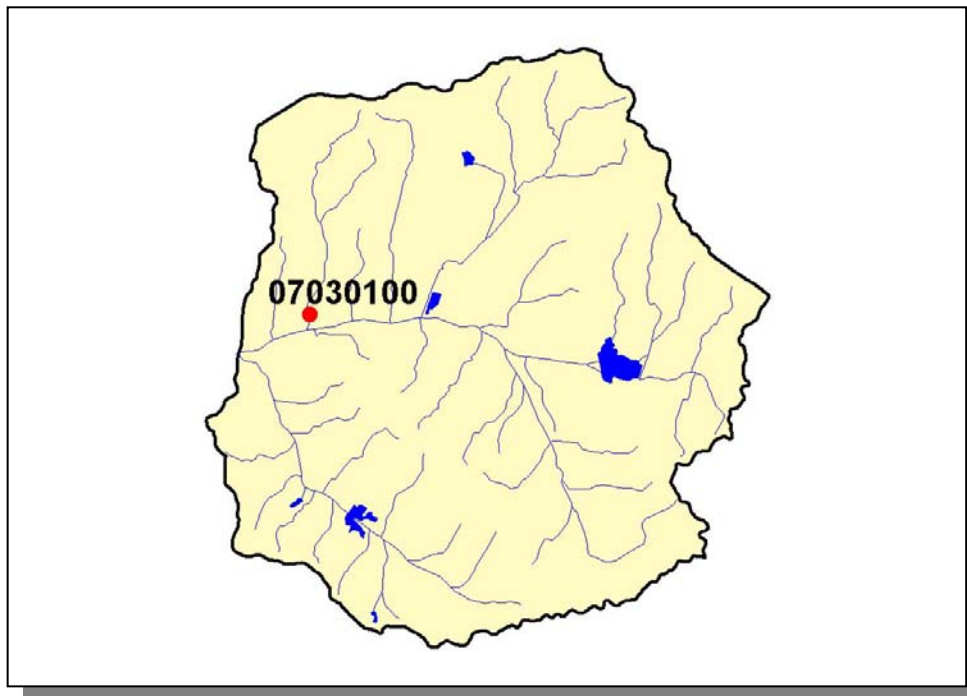


Figure 4-260. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080701. More information is provided in Appendix IV.

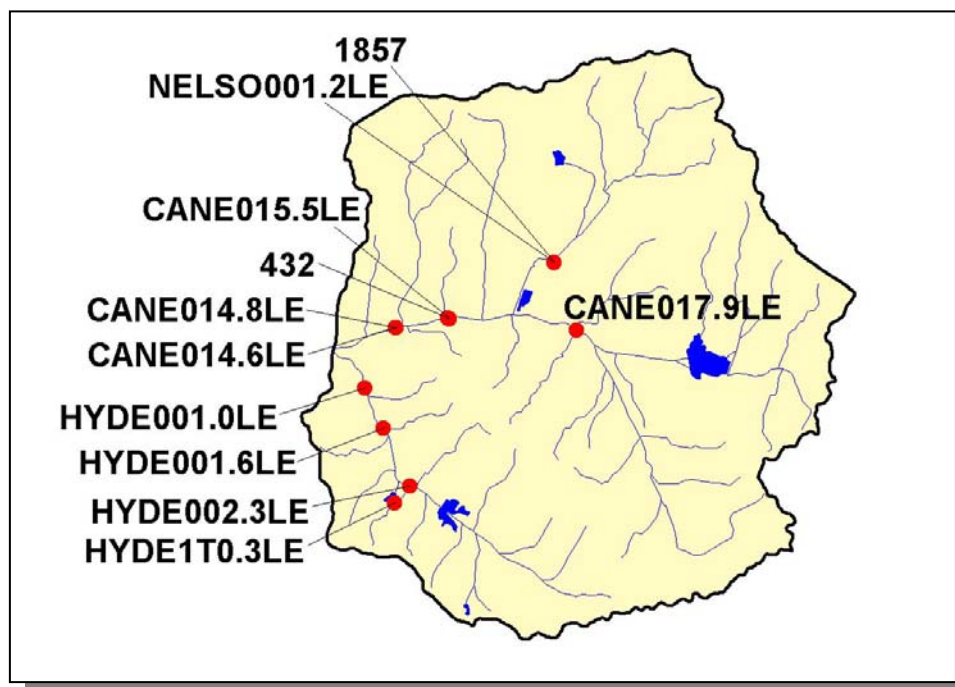


Figure 4-261. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080701. More information, including site names and locations, is provided in Appendix IV.

4.2.G.i.a. Point Source Contributions.

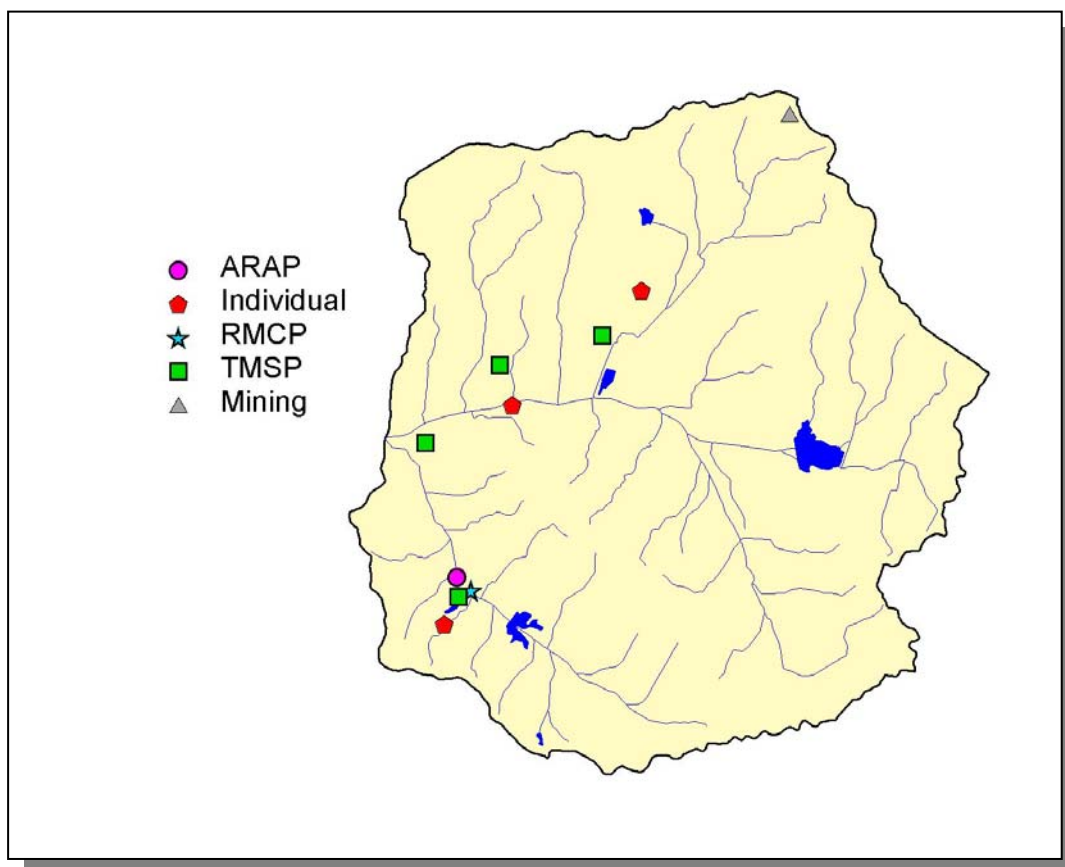


Figure 4-262. Location of Permits Issued in Subwatershed 080102080701. More information, including the names of facilities, is provided in Appendix IV.

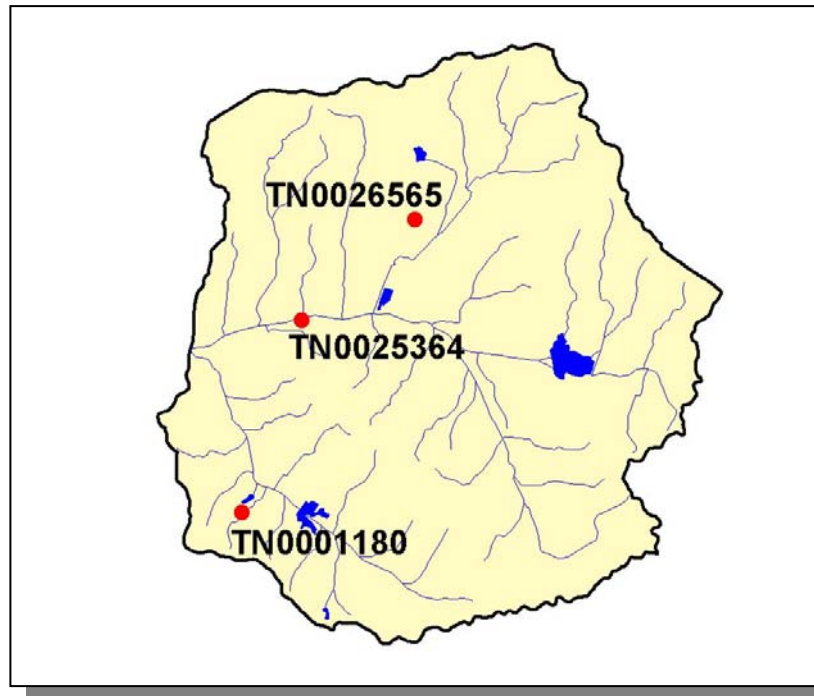


Figure 4-263. Location of Active NPDES Sites in Subwatershed 080102080701. More information, including the names of facilities, is provided in Appendix IV.

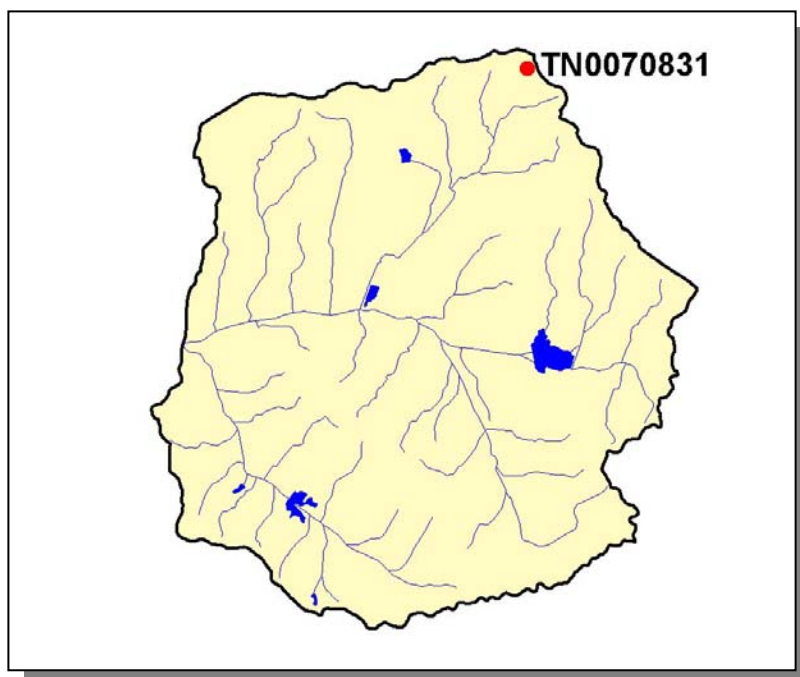


Figure 4-264. Location of Active Mining Sites in Subwatershed 080102080701. More information, including the names of mining operations, is provided in Appendix IV.

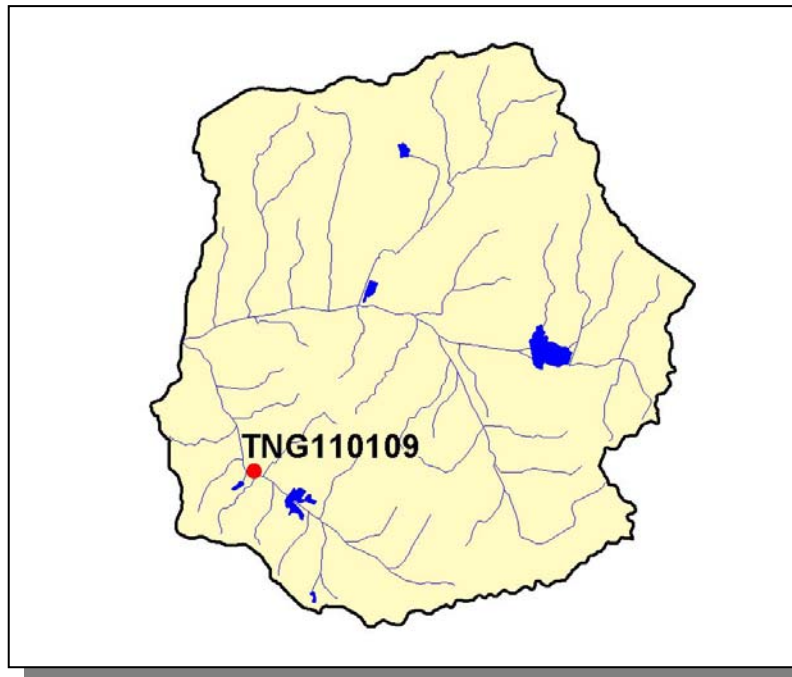


Figure 4-265. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 080102080701. More information is provided in Appendix IV.

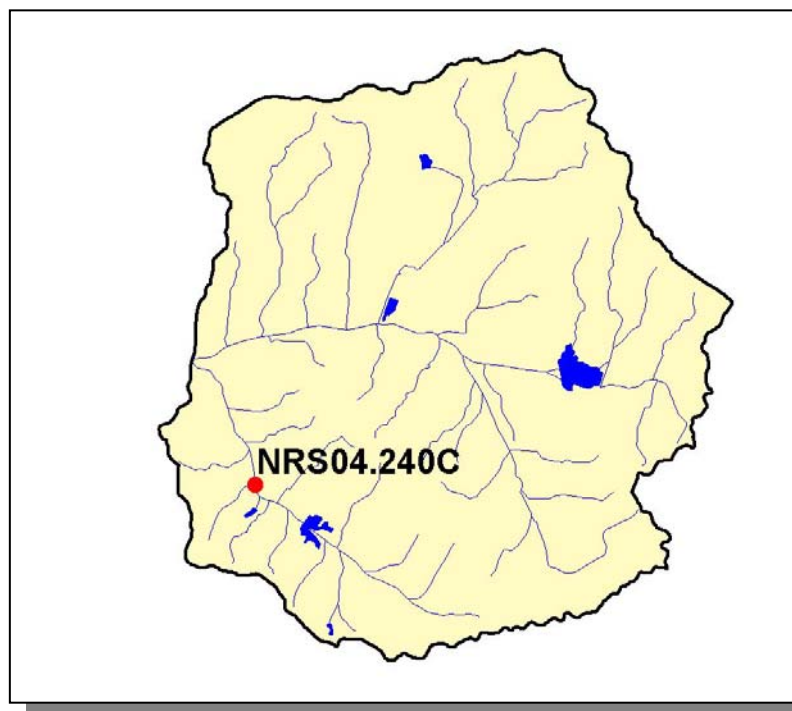


Figure 4-266. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080701. More information is provided in Appendix IV.

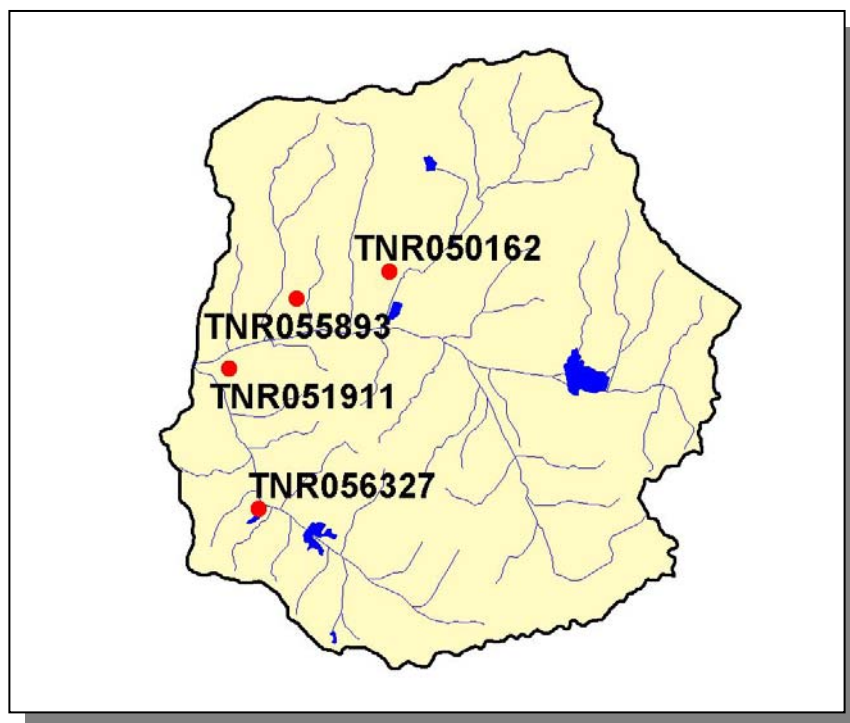


Figure 4-267. Location of TMSP Sites in Subwatershed 080102080701. More information, including the names of facilities, is provided in Appendix IV.

4.2.G.i.a.i. Dischargers to Water Bodies Listed on the 2004 303(d) List

There are two NPDES facilities discharging to water bodies listed on the 2004 303(d) list in Subwatershed 080102080701:

- TN0001180 (Siegal-Robert Automotive) discharges to an unnamed tributary @ RM 0.6 to Hyde Creek @ RM 2.3
- TN0025364 (Ripley STP) discharges to Cane Creek @ RM 15.4

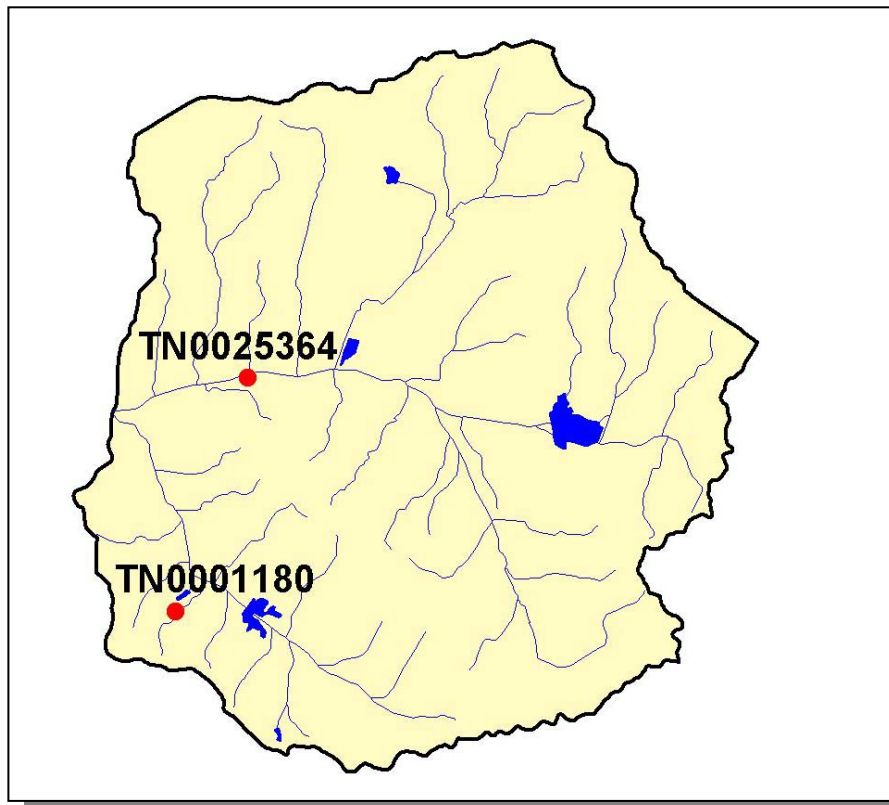


Figure 4-268. Location of NPDES Dischargers to Water Bodies Listed on the 2004 303(d) List in Subwatershed 080102080701. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	3Q2	1Q10	3Q10	3Q20	7Q10
TN0001180	0.01	na	0.00	0.00	0.00
TN0025364	0.01	na	0.00	0.00	0.00

Table 4-237. Receiving Stream Low Flow Information for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080701. Data are in cubic feet per second (CFS). Data were obtained from the USGS web application StreamStats at <http://water.usgs.gov/osw/streamstats/>. (na, data not available)

PERMIT #	NO ₃	NO ₂	Zn	Cu	Ni	Cd	Hg	Se	As	Mo	FLOW	TEMPERATURE
TN0001180	X	X									X	X
TN0025364	X		X	X	X	X	X	X	X	X	X	

Table 4-238. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080701.

PERMIT #	WET	CBOD ₅	NH ₃	Se	Cl ⁻	HARDNESS	TSS	SETTLEABLE SOLIDS	CN	DO	pH
TN0001180	X	X		X	X	X	X		X	X	X
TN0025364	X	X	X				X	X		X	X

Table 4-239. Inorganic Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080701. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids; DO, Dissolved Oxygen.

PERMIT #	Pb	Zn	Cr	Cu	Ni	Cd	Ag
TN0001180	X	X	X	X	X	X	X
TN0025364	X						

Table 4-240. Metals Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080701.

PERMIT #	OIL and GREASE
TN0025364	X

Table 4-241. Oil and Grease Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080701.

PERMIT #	E. coli	FECAL COLIFORM
TN0025364	X	X

Table 4-242. Bacteria Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2004 303(d) List in Subwatershed 080102080701.

4.2.G.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
4	1,636	<5	441	<5

Table 4-243. Summary of Livestock Count Estimates in Subwatershed 080102080701. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Haywood	3,442	6,220	29	237	1,740	12
Lauderdale	0	8,739	0	243	2,355	11

Table 4-244. Summary of Livestock Count Estimates in Haywood and Lauderdale Counties. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	2.25
Grass (Hayland)	0.40
Legumes, Grass (Hayland)	0.58
Legumes (Hayland)	0.65
Grass, Forbs, Legumes (Mixed Pasture)	2.38
Corn (Row Crops)	14.70
Cotton (Row Crops)	13.52
Sorghum (Row Crops)	4.02
Soybeans (Row Crops)	13.45
Wheat (Close-Grown Cropland)	9.27
All Other Close-Grown Cropland	3.08
Fruit (Horticultural)	0.76
Other Vegetable and Truck Crops	4.00
Summer Fallow (Other Cropland)	8.70
Other Cropland not Planted	0.85
Conservation Reserve Program Lands	1.78
Other Land in Farms	0.05
Farmsteads and Ranch Headquarters	0.09

Table 4-245. Annual Estimated Total Soil Loss in Subwatershed 080102080701.

4.2.G.ii. 080102080702 (Lower Cane Creek).

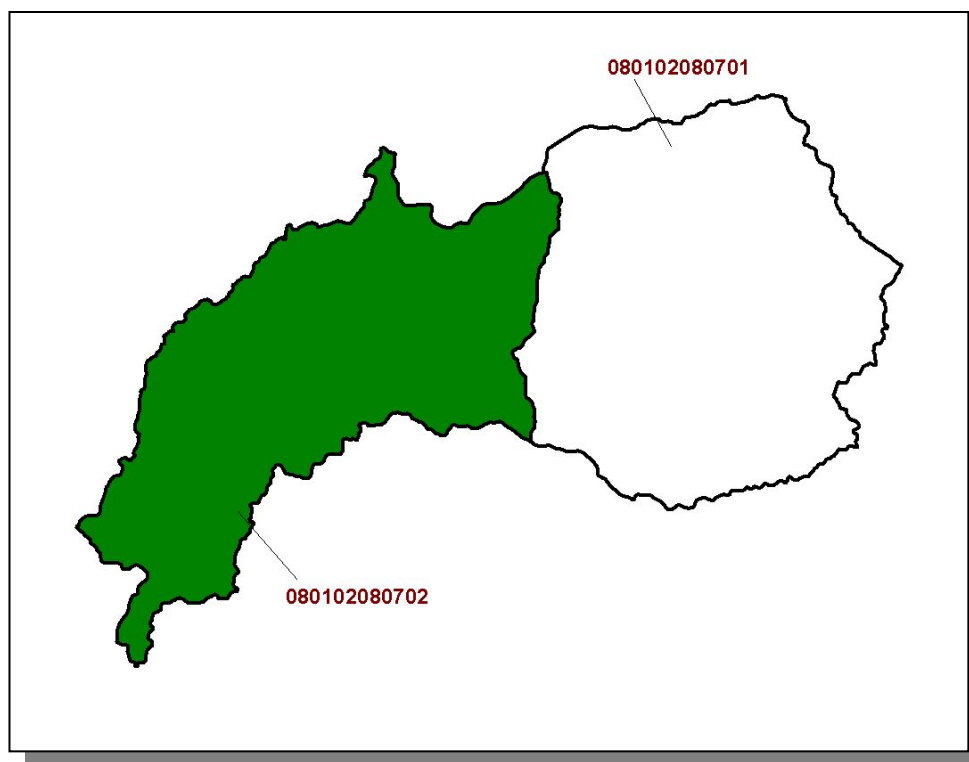


Figure 4-269. Location of Subwatershed 080102080702. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

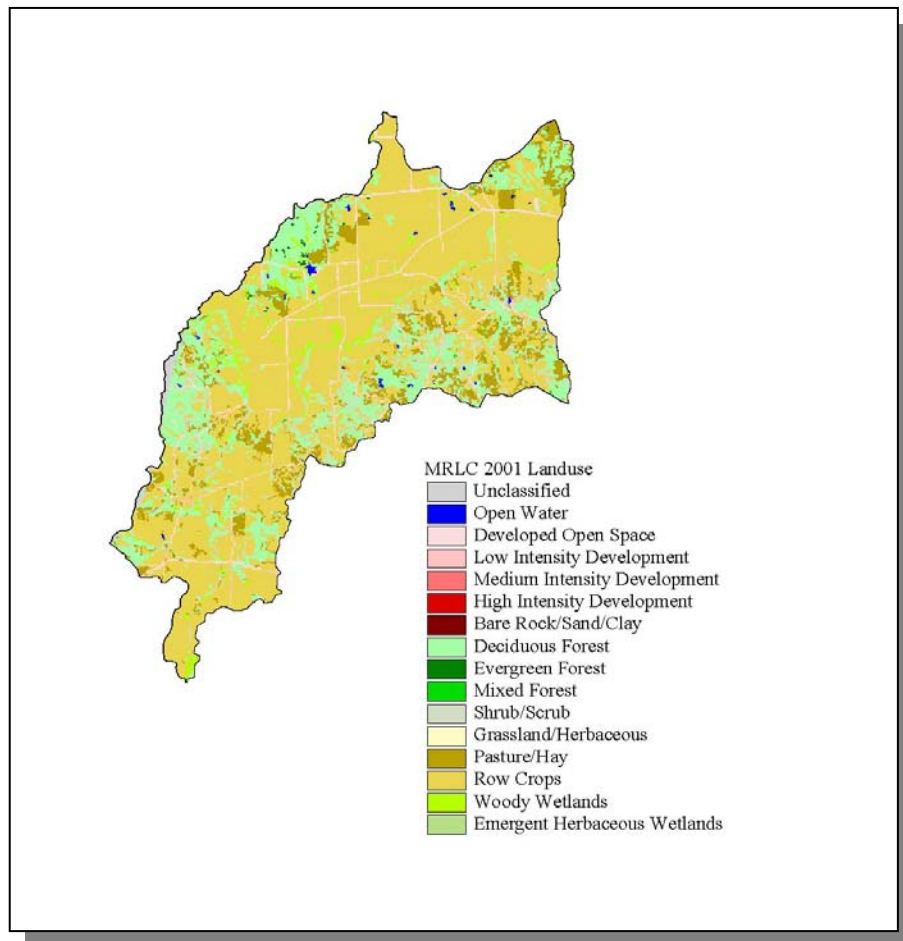


Figure 4-270. Illustration of Land Use Distribution in Subwatershed 080102080702.

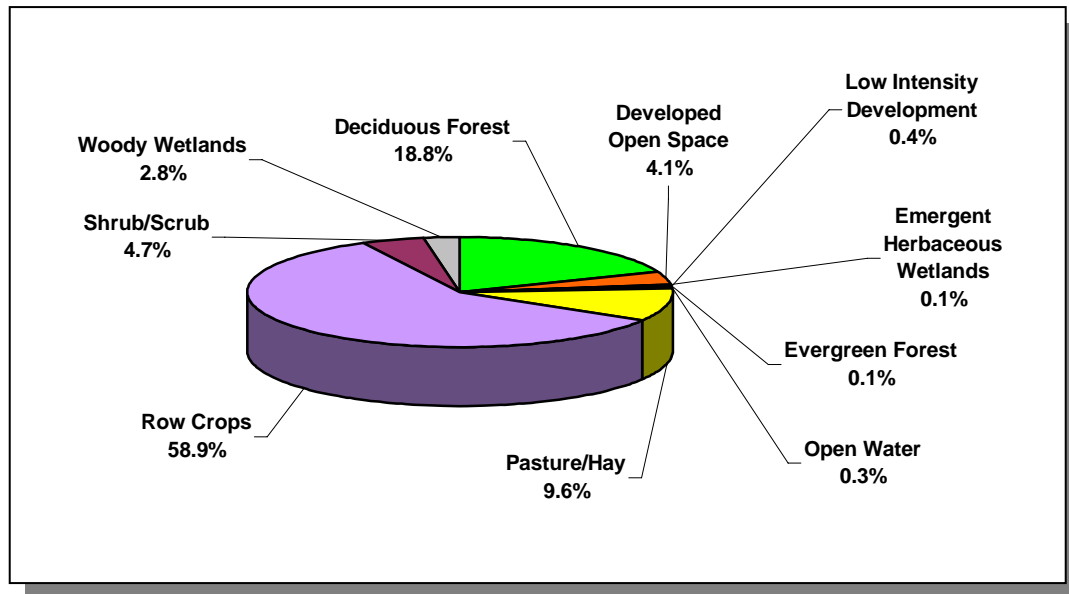


Figure 4-271. Land Use Distribution in Subwatershed 080102080702. More information is provided in Appendix IV.

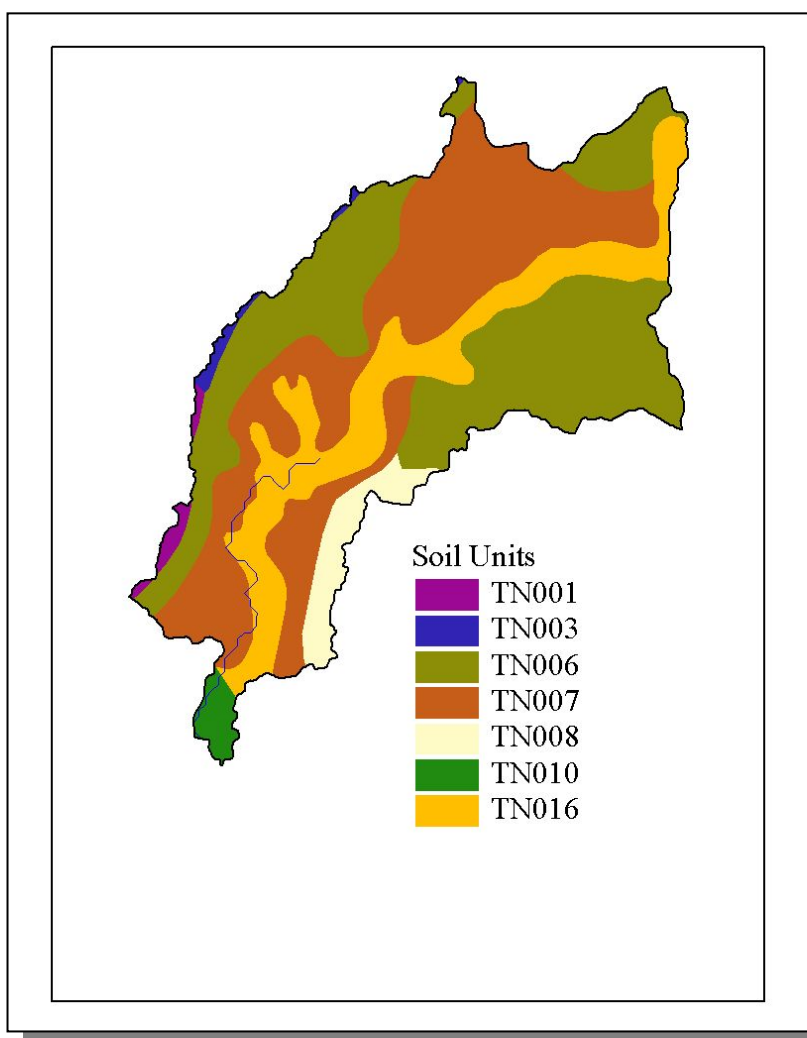


Figure 4-272. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080702.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN001	14.00	C	23.12	7.00	Silty Loam	0.33
TN003	62.00	C	0.50	6.65	Silty Clay	0.33
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN007	29.00	C	1.30	5.36	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-246. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080702. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Lauderdale	23,491	24,128	27,101	8.23	1,932	1,985	2,229	15.4

Table 4-247. Population Estimates in Subwatershed 080102080702.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Ripley	Lauderdale	6,188	2,490	2,420	51	19

Table 4-248. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080702.

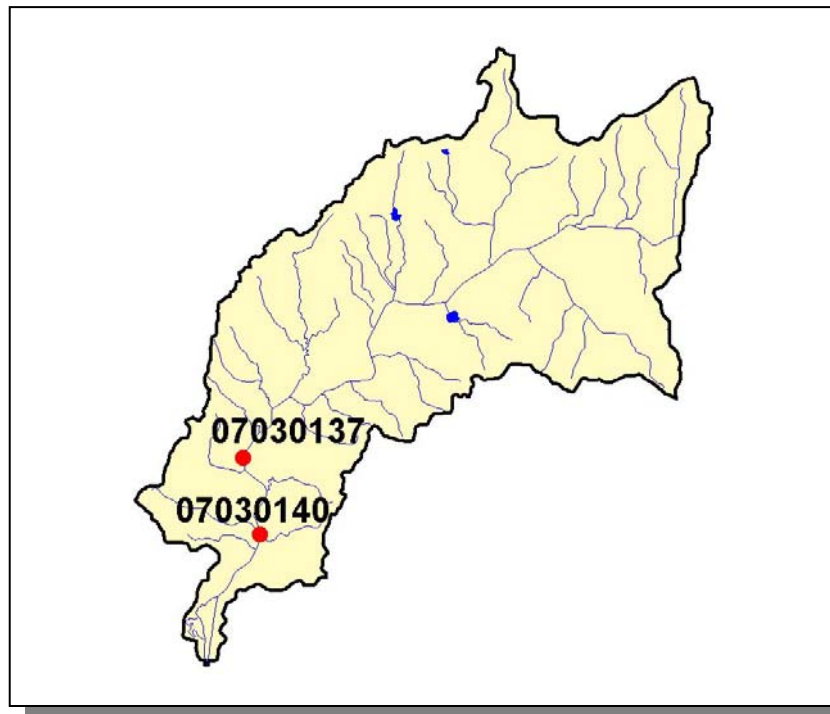


Figure 4-273. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080702. More information is provided in Appendix IV.

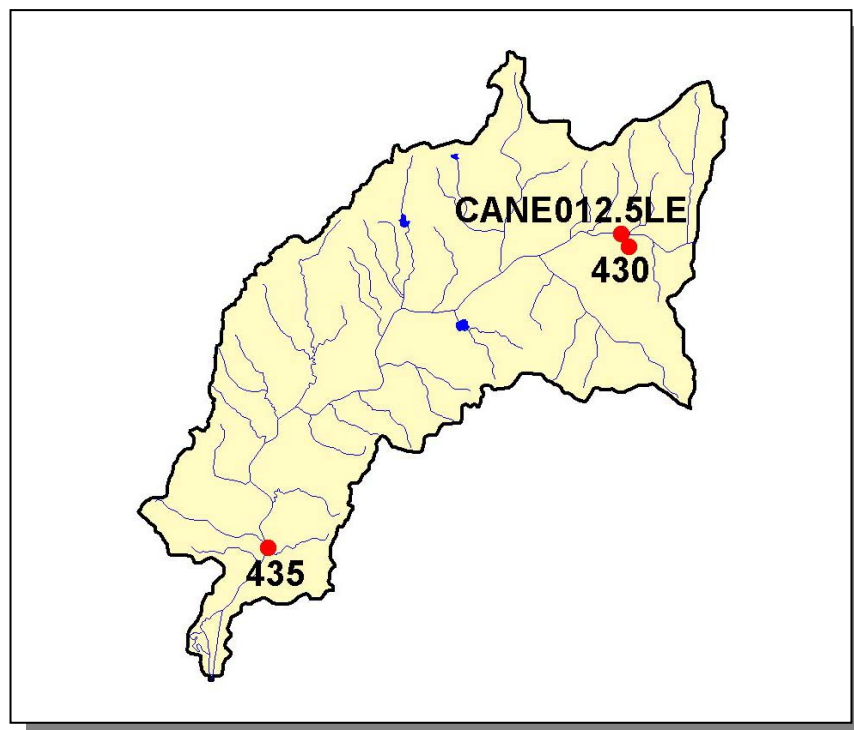


Figure 4-274. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080702. More information, including site names and locations, is provided in Appendix IV.

4.2.G.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.G.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Beef Cow	Chickens (Layers)	Hogs	Sheep
1,433	<5	386	<5

Table 4-249. Summary of Livestock Count Estimates in Subwatershed 080102080702. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS				
County	Beef Cow	Chickens (Layers)	Hogs	Sheep
Lauderdale	8,739	243	2,355	11

Table 4-250. Summary of Livestock Count Estimates in Lauderdale County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	2.27
Grass (Hayland)	0.37
Legumes, Grass (Hayland)	0.58
Legumes (Hayland)	0.65
Grass, Forbs, Legumes (Mixed Pasture)	2.40
Corn (Row Crops)	14.77
Cotton (Row Crops)	13.53
Soybeans (Row Crops)	13.51
Wheat (Close-Grown Cropland)	9.27
Other Vegetable and Truck Crops	4.00
Summer Fallow (Other Cropland)	8.70
Conservation Reserve Program Lands	1.79
Other Land in Farms	0.05
Farmsteads and Ranch Headquarters	0.09

Table 4-251. Annual Estimated Total Soil Loss in Subwatershed 080102080702.

4.2.H. 0801020808.

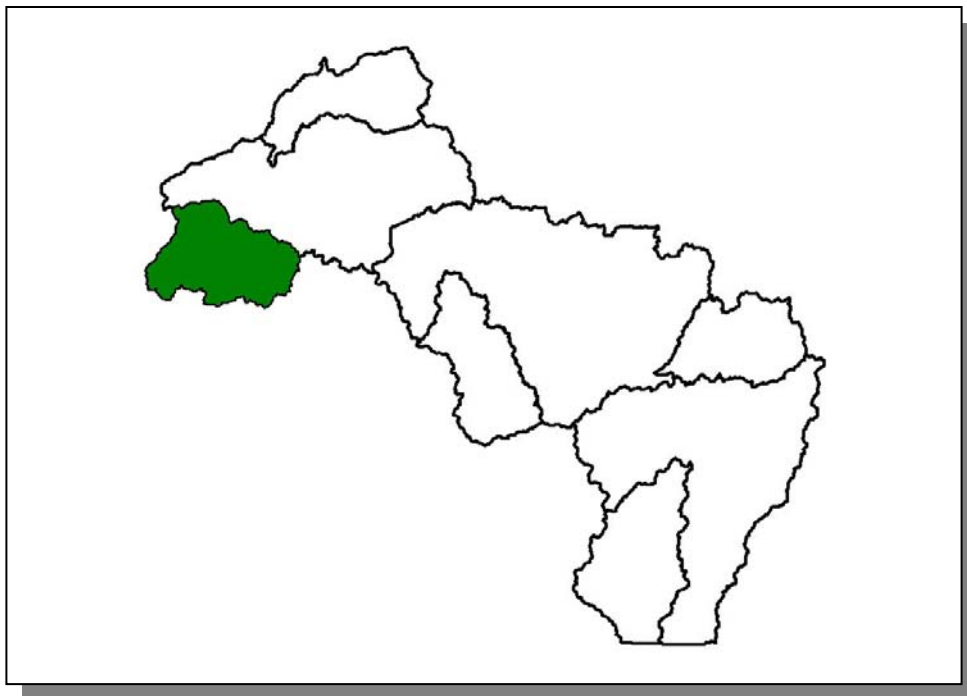


Figure 4-275. Location of Subwatershed 0801020808. All Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.H.i. 080102080801 (Upper Indian Creek).

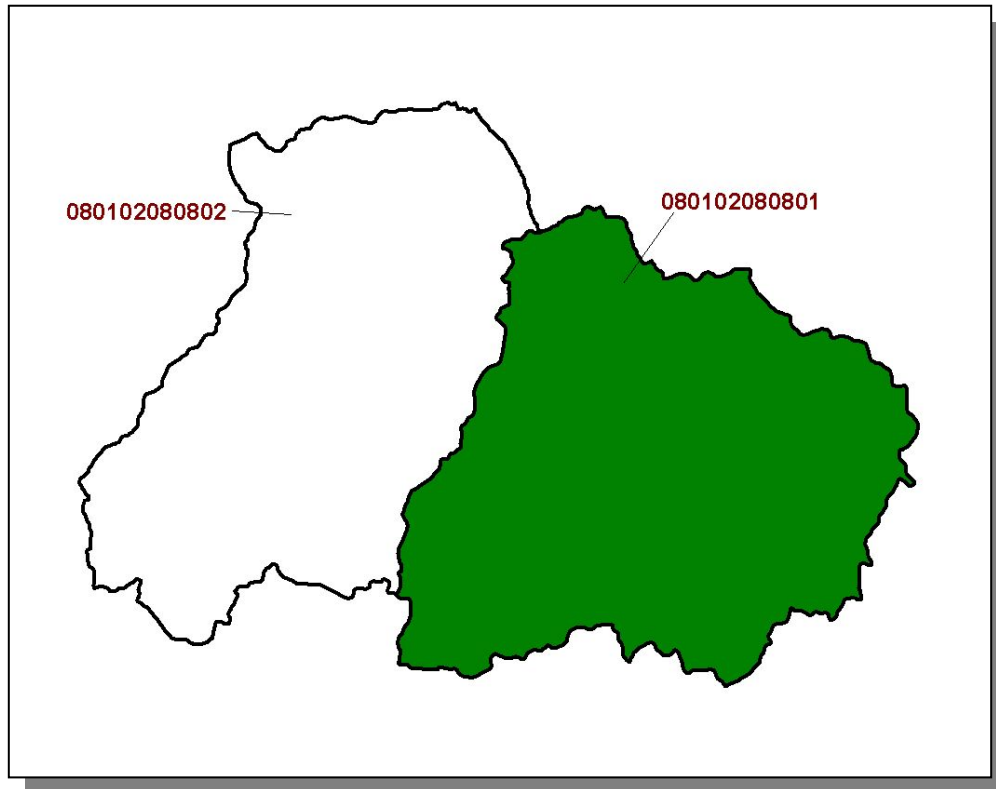


Figure 4-276. Location of Subwatershed 080102080801. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

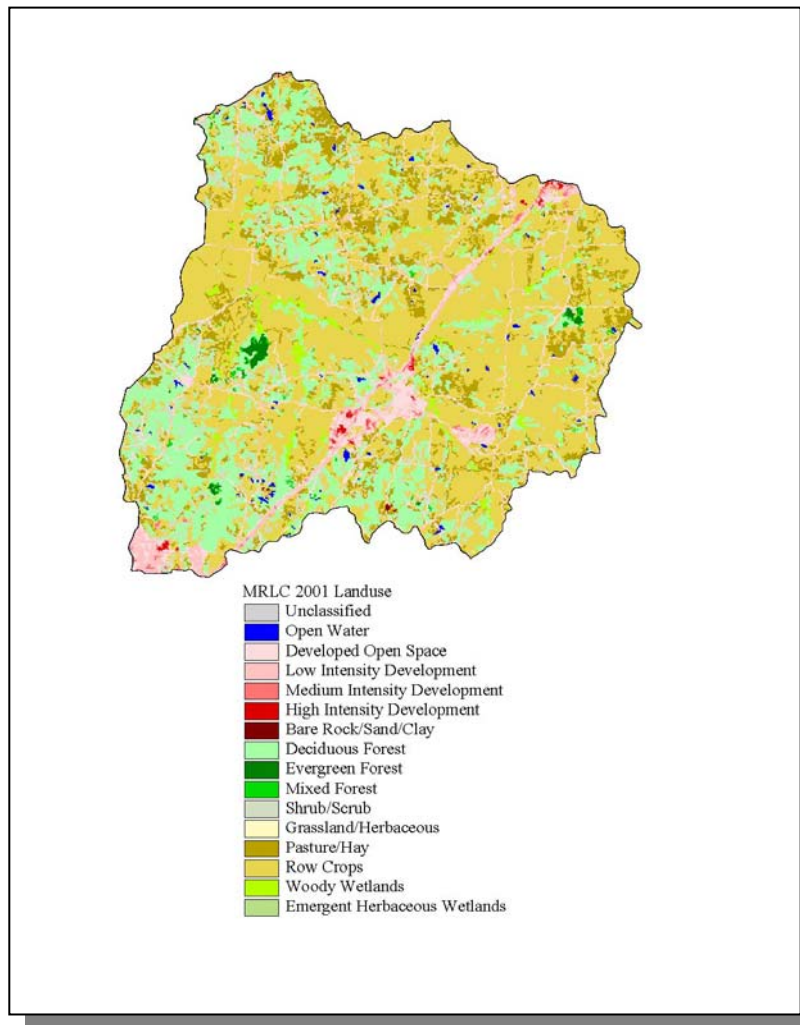


Figure 4-277. Illustration of Land Use Distribution in Subwatershed 080102080801.

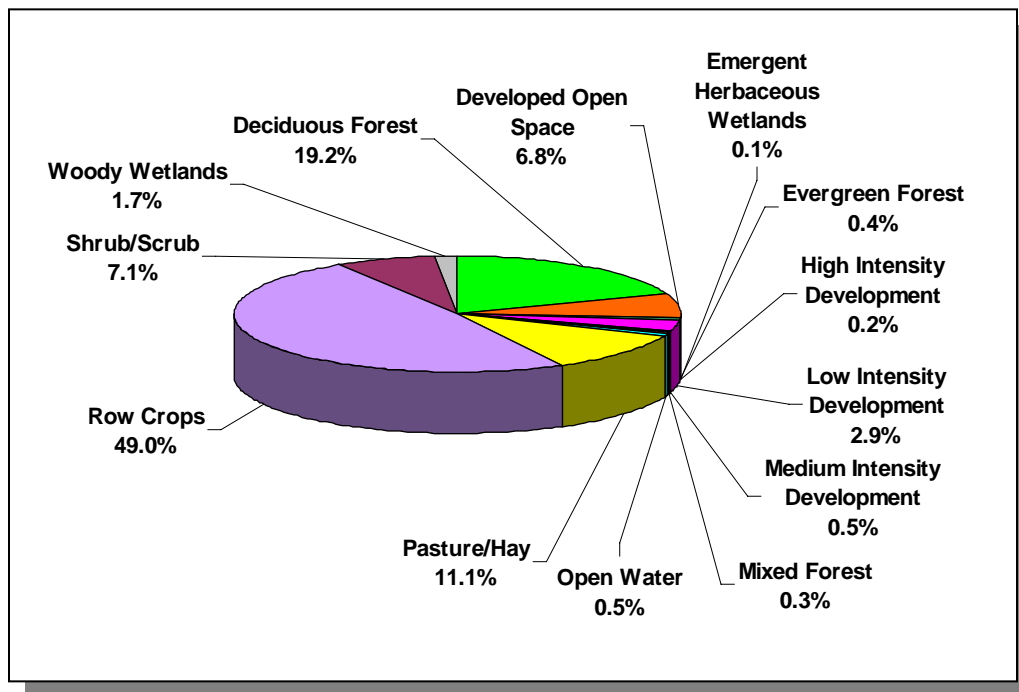


Figure 4-278. Land Use Distribution in Subwatershed 080102080801. More information is provided in Appendix IV.

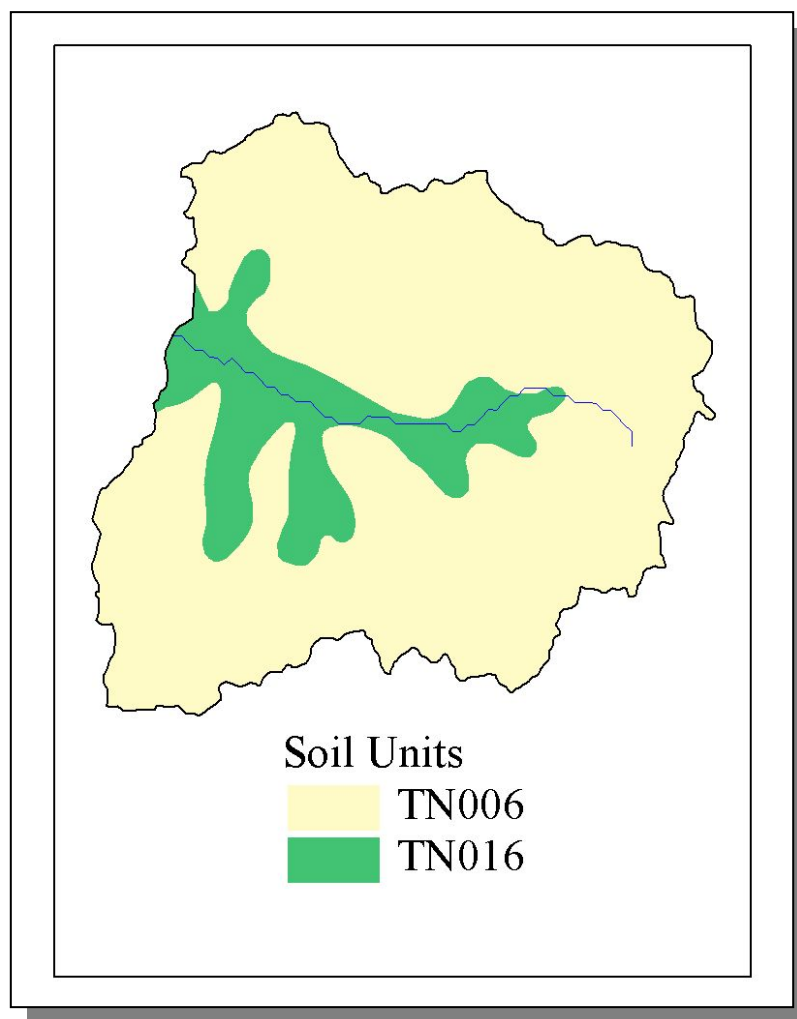


Figure 4-279. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080801.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-252. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080801. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Tipton	37,568	45,986	51,271	11.51	4,326	5,295	5,903	36.5

Table 4-253. Population Estimates in Subwatershed 080102080801

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Atoka	Tipton	648	280	110	169	1
Brighton	Tipton	742	330	35	288	7
Burlison	Tipton	364	165	14	138	13
Covington	Tipton	7,487	2,920	2,717	203	0
Garland	Tipton	181	77	13	59	5
Munford	Tipton	2,331	894	785	104	5
Total		11,753	4,666	3,674	961	31

Table 4-254. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080801.

4.2.H.i.a. Point Source Contributions.

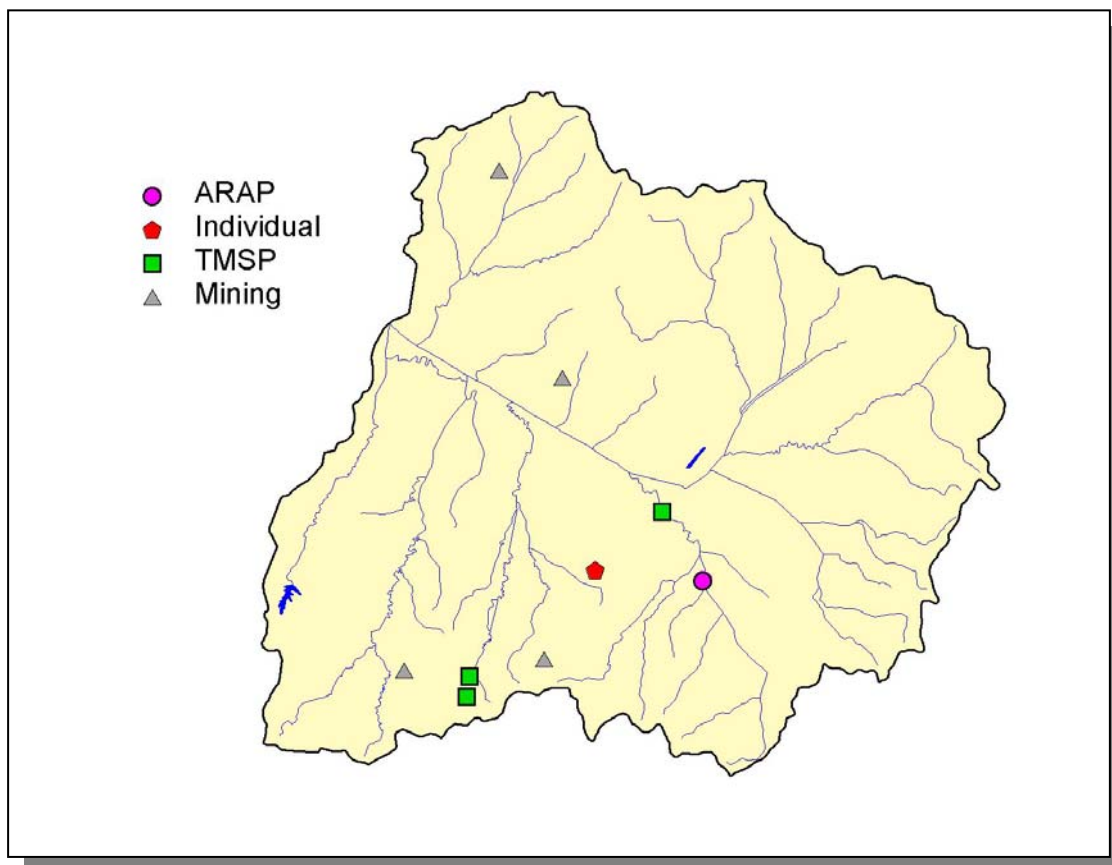


Figure 4-280. Location of Permits Issued in Subwatershed 080102080801. More information, including the names of facilities, is provided in Appendix IV.

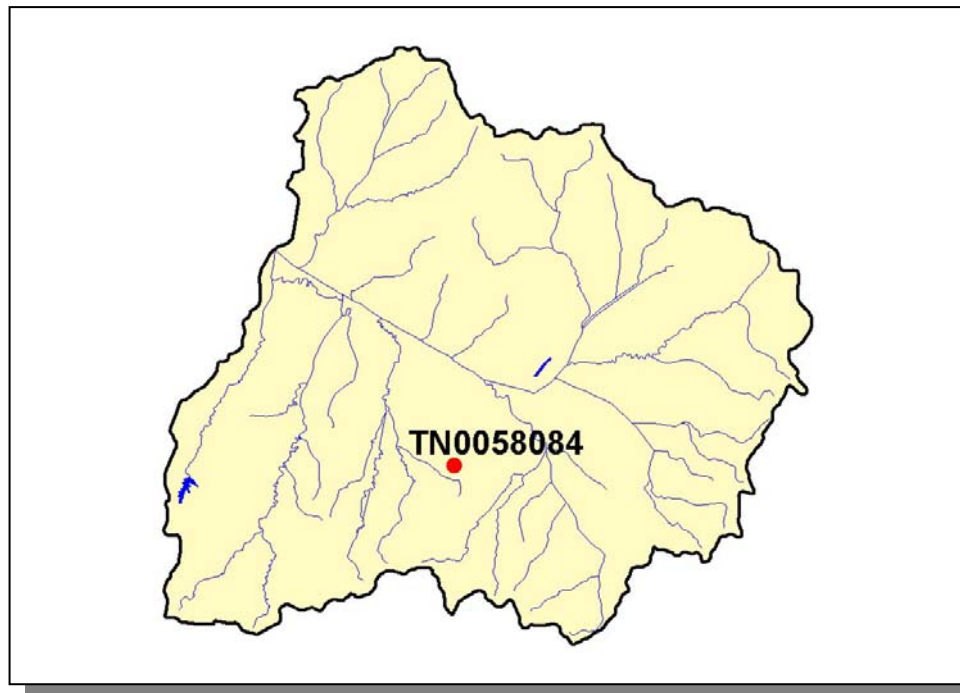


Figure 4-281. Location of Active NPDES Sites in Subwatershed 080102080801. More information, including the names of facilities, is provided in Appendix IV.

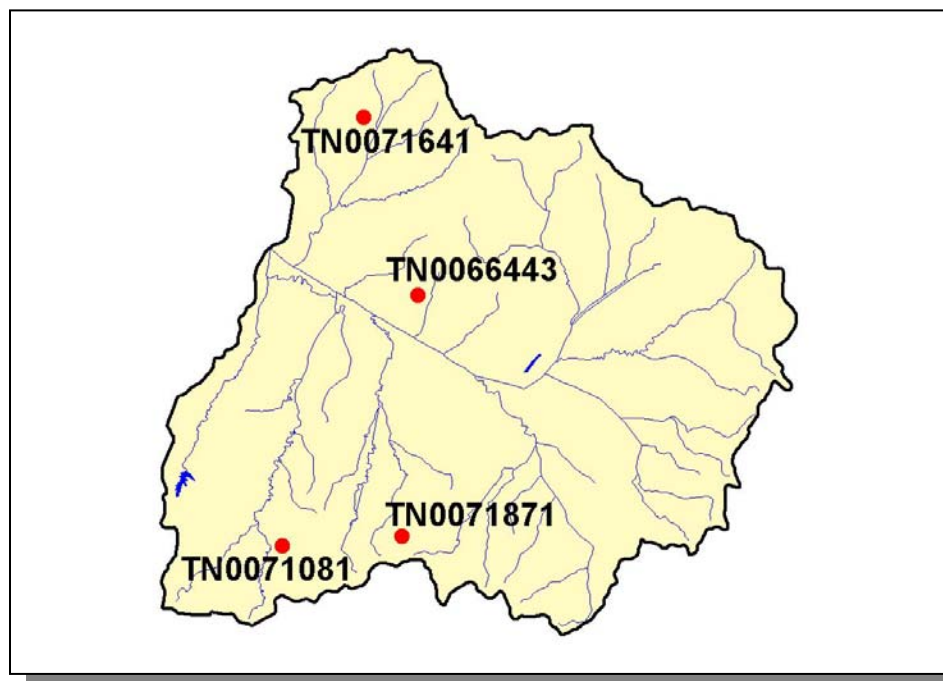


Figure 4-282. Location of Active Mining Sites in Subwatershed 080102080801. More information, including the names of mining operations, is provided in Appendix IV.



Figure 4-283. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102080801. More information is provided in Appendix IV.



Figure 4-284. Location of TMSP Sites in Subwatershed 080102080801. More information, including the names of facilities, is provided in Appendix IV.

4.2.H.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
810	1,463	<5	<5	37	13

Table 4-255. Summary of Livestock Count Estimates in Subwatershed 080102080801. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Tipton	5,422	9,796	14	334	251	86

Table 4-256. Summary of Livestock Count Estimates in Tipton County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Tipton	50.9	50.9	1.0	5.6

Table 4-257. Forest Acreage and Annual Removal Rates (1987-1994) in Tipton County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.84
Grass (Hayland)	2.09
Legumes (Hayland)	0.54
Grass, Forbs, Legumes (Mixed Pasture)	1.01
Cotton (Row Crops)	16.59
Soybeans (Row Crops)	18.74
Other Vegetable and Truck Crops	21.48
Other Cropland not Planted	0.22
Conservation Reserve Program Lands	1.05
Farmsteads and Ranch Headquarters	0.69

Table 4-258. Annual Estimated Total Soil Loss in Subwatershed 080102080801.

4.2.H.ii. 080102080802 (Lower Indian Creek).

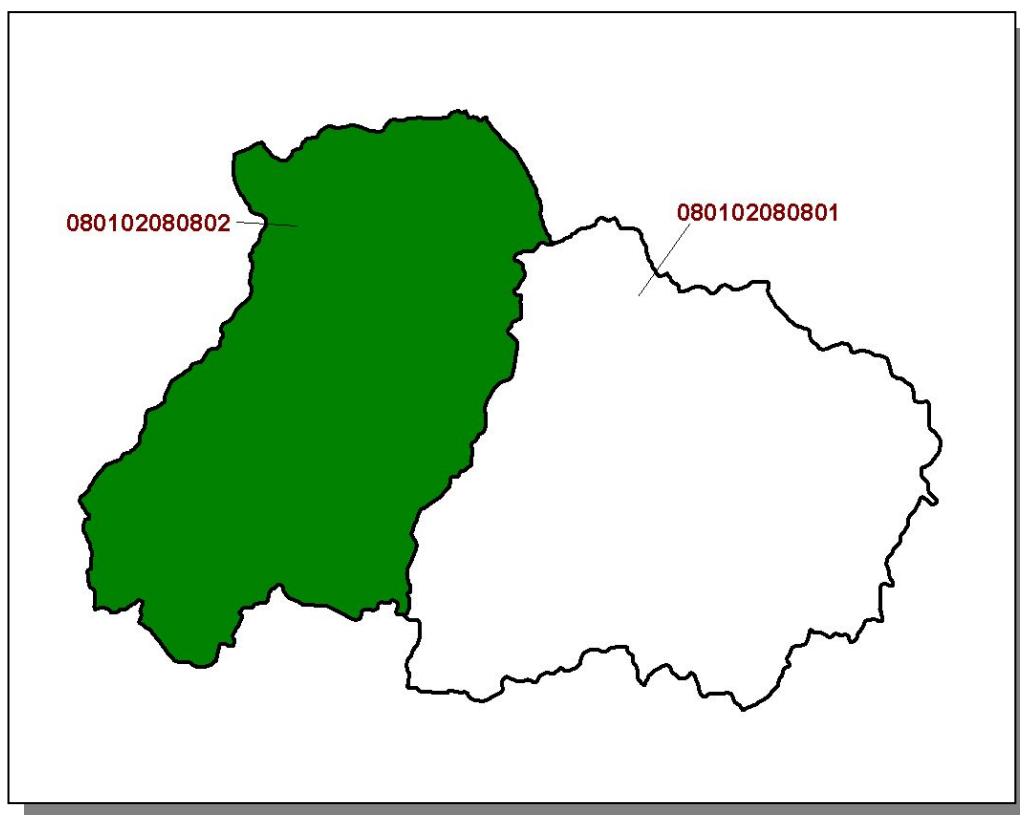


Figure 4-285. Location of Subwatershed 080102080802. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

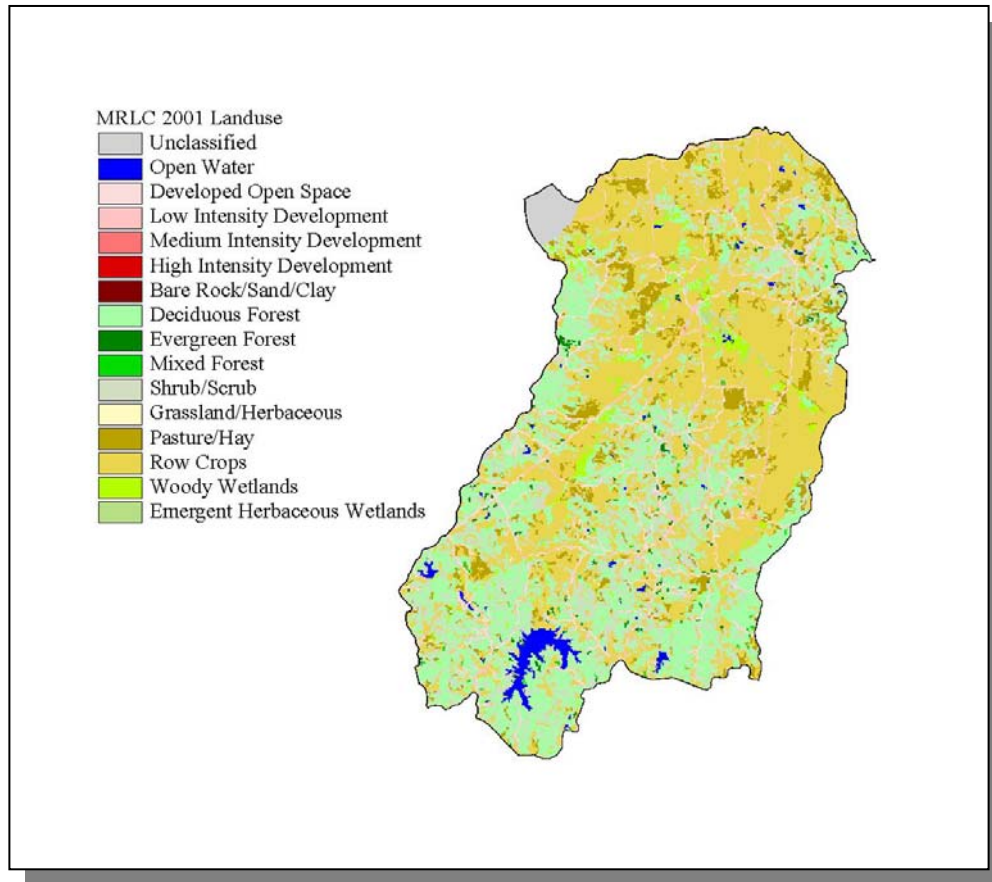


Figure 4-286. Illustration of Land Use Distribution in Subwatershed 080102080802.

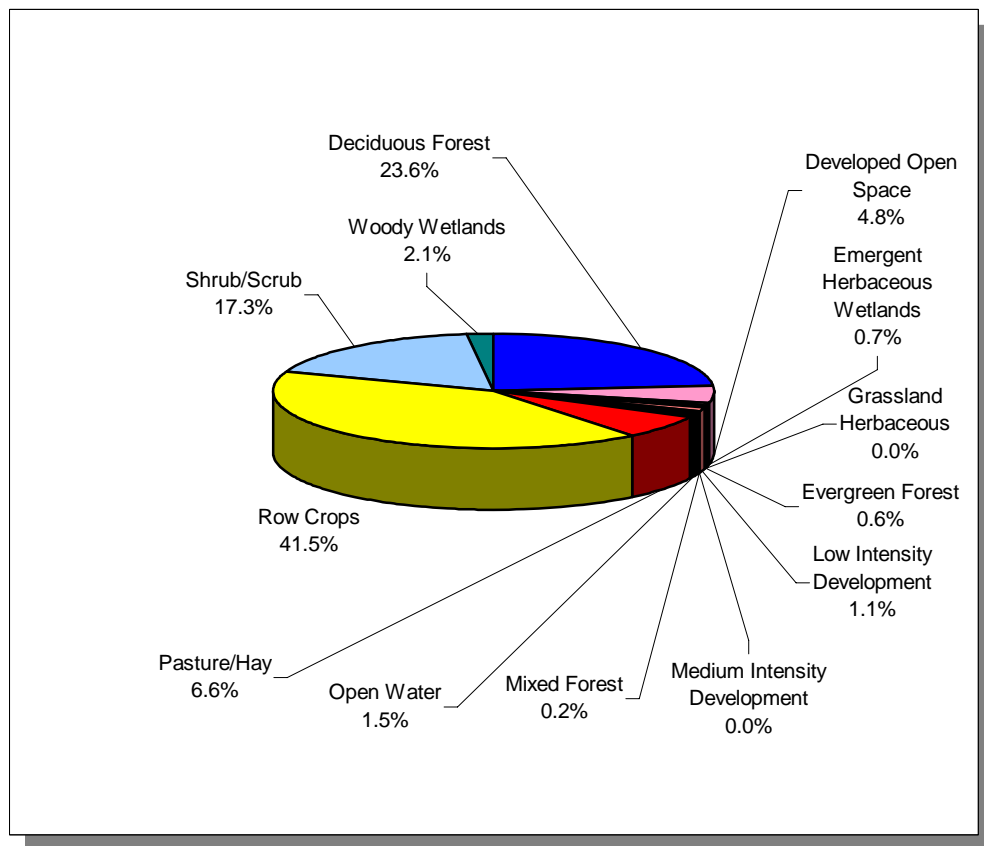


Figure 4-287. Land Use Distribution in Subwatershed 080102080802. More information is provided in Appendix IV.

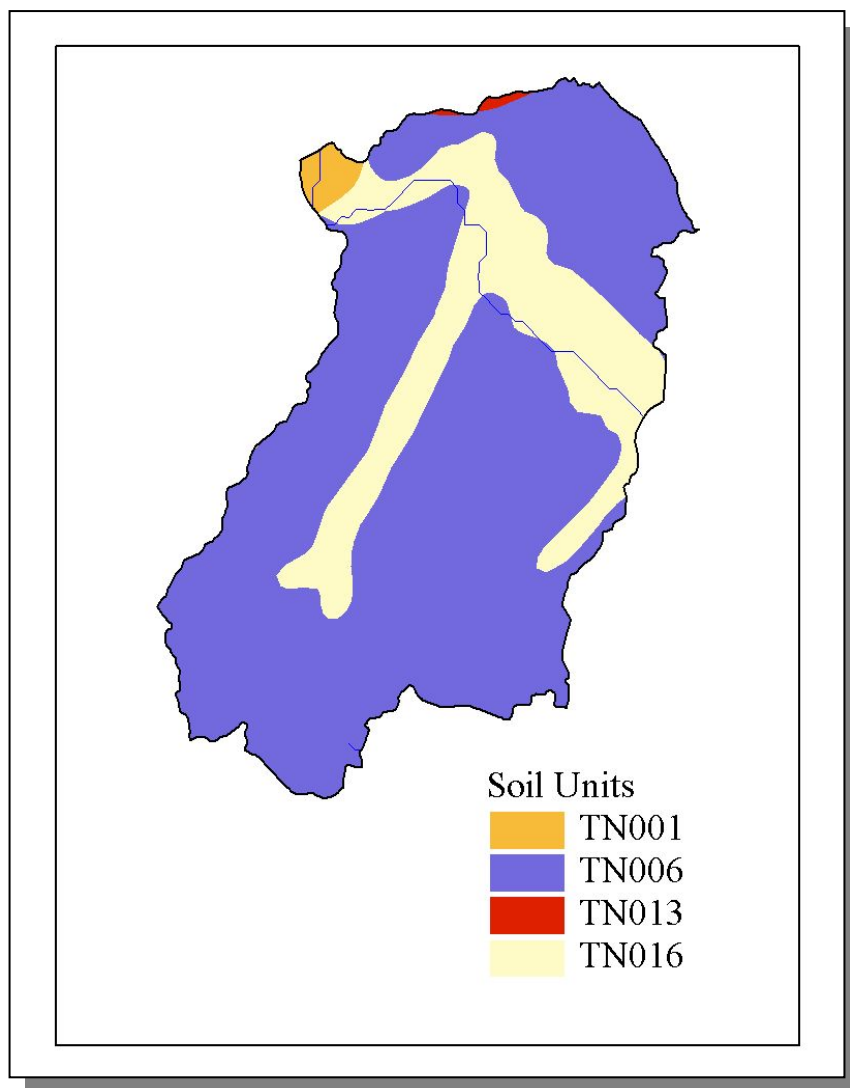


Figure 4-288. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080802.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN001	14.00	C	2.31	7.00	Silty Loam	0.33
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN013	72.00	C	1.30	5.44	Silty Loam	0.46
TN016	0.00	C	1.30	6.47	Silty Loam	0.44

Table 4-259. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102080802. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Tipton	37,568	45,986	51,271	10.15	3,811	4,666	5,202	36.5

Table 4-260. Population Estimates in Subwatershed 080102080802.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Burlison	Tipton	364	165	14	138	13
Gilt Edge	Tipton	453	177	0	173	4
Total		817	342	14	311	17

Table 4-261. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102080802.

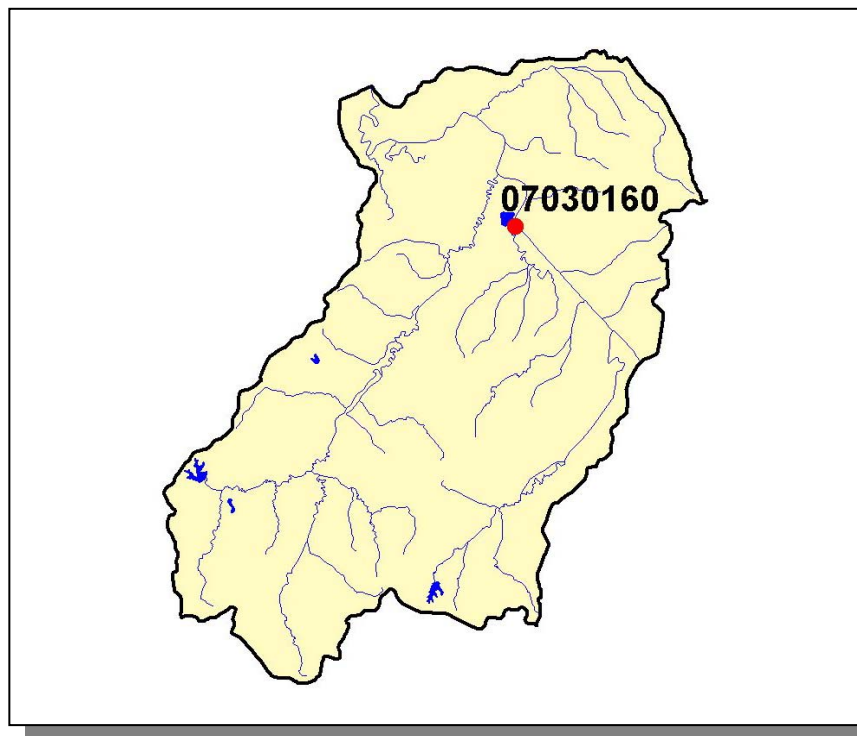


Figure 4-289. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102080802. More information is provided in Appendix IV.

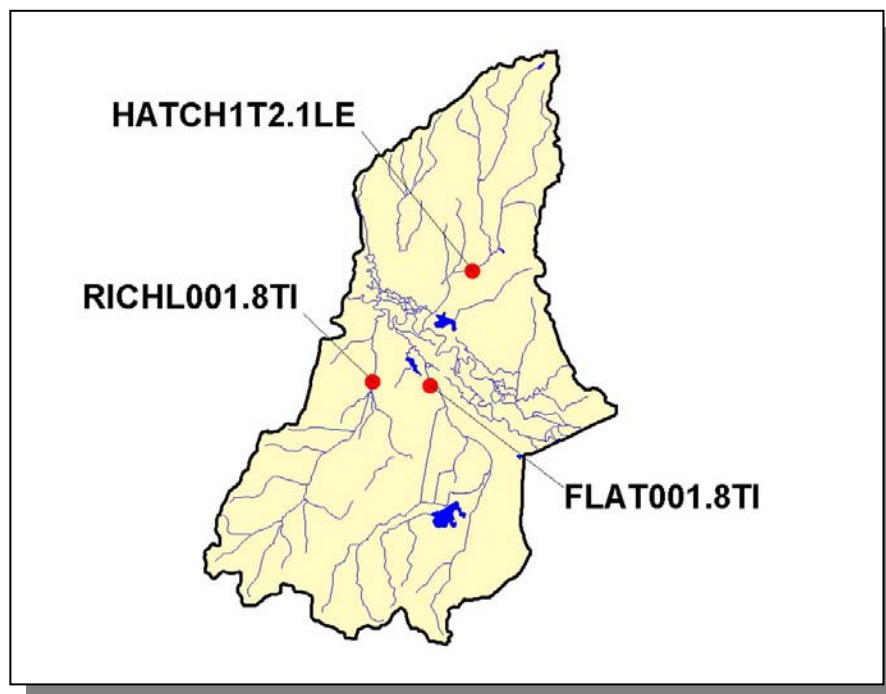


Figure 4-290. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102080802. More information, including site names and locations, is provided in Appendix IV.

4.2.H.ii.a. Point Source Contributions.

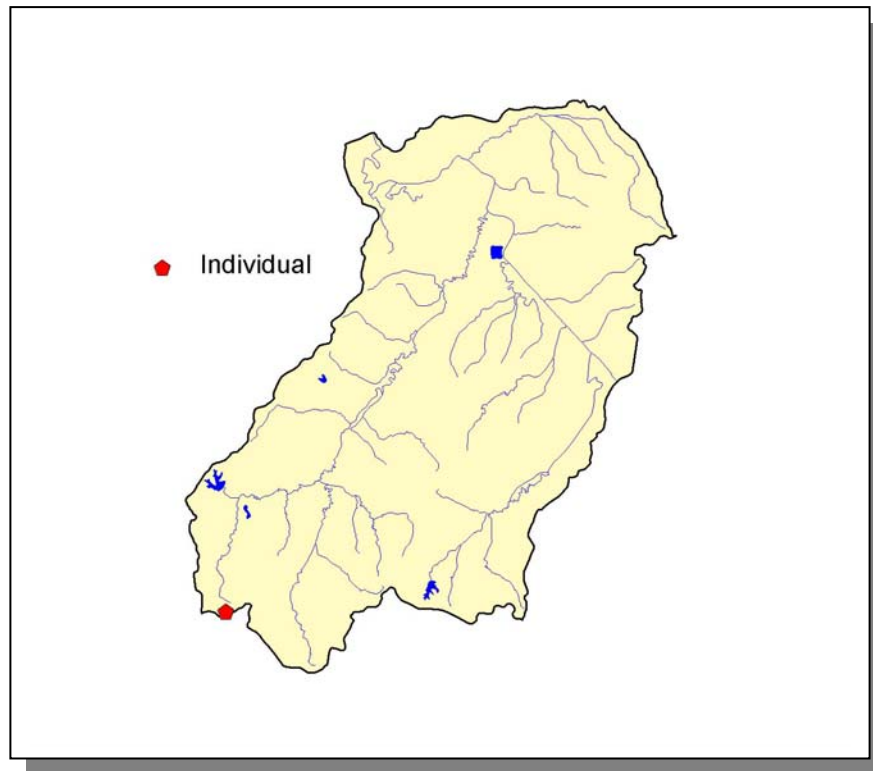


Figure 4-291. Location of Permits Issued in Subwatershed 080102080802. More information, including the names of facilities, is provided in Appendix IV.

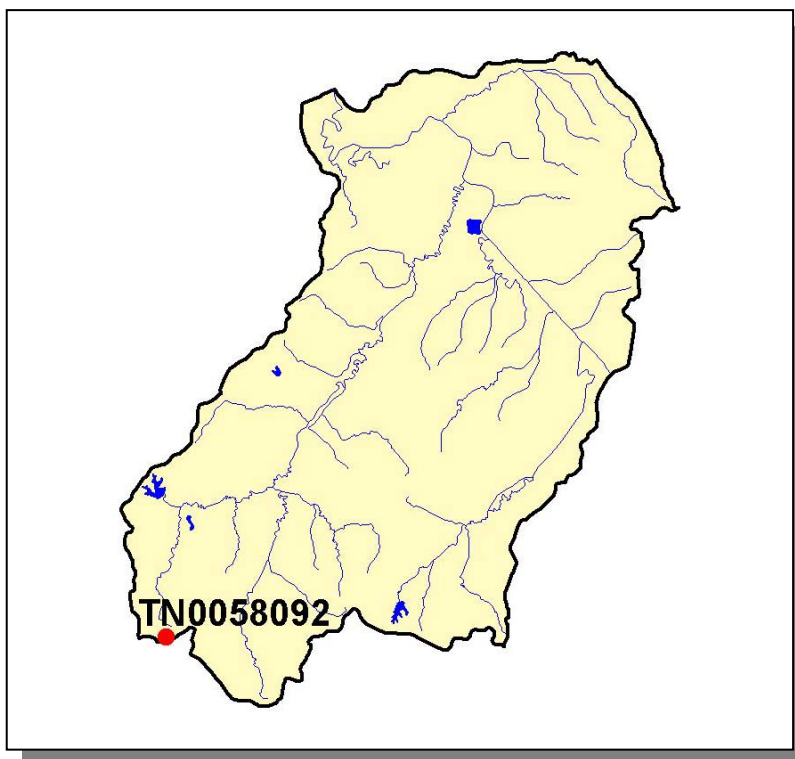


Figure 4-292. Location of Active NPDES Sites in Subwatershed 080102080802. More information, including the names of facilities, is provided in Appendix IV.

4.2.H.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
659	1,191	<5	<5	31	10

Table 4-262. Summary of Livestock Count Estimates in Subwatershed 080102080802. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Tipton	5,422	9,796	14	334	251	86

Table 4-263. Summary of Livestock Count Estimates in Tipton County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Tipton	50.9	50.9	1.0	5.6

Table 4-264. Forest Acreage and Annual Removal Rates (1987-1994) in Tipton County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.84
Grass (Hayland)	2.09
Legumes (Hayland)	0.54
Grass, Forbs, Legumes (Mixed Pasture)	1.01
Cotton (Row Crops)	16.59
Soybeans (Row Crops)	18.74
Other Vegetable and Truck Crops	21.48
Other Cropland not Planted	0.22
Conservation Reserve Program Lands	1.05
Farmsteads and Ranch Headquarters	0.69

Table 4-265. Annual Estimated Total Soil Loss in Subwatershed 080102080802.